ASSESSING THE SOCIAL EFFECTS OF A THERAPEUTIC RECREATION SUMMER CAMP FOR ADOLESCENTS WITH CHRONIC ILLNESS

by

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A thesis submitted to the faculty of
The University of Utah
in partial fulfillment of the requirements for the degree of

Master of Science

Department of Parks, Recreation, and Tourism

The University of Utah

May 2012

The University of Utah Graduate School

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ABSTRACT

This study assessed the social effects of a therapeutic recreation summer camp for adolescents with chronic illness. Over two million adolescents in the United States have some form of a chronic illness and frequently have decreased levels of social self-efficacy and social performance. Social self-efficacy is the belief that an individual can successfully perform a given social task or social behavior. Both the summer camp industry and the field of therapeutic recreation have been found to help increase social self-efficacy and social performance among adolescents with chronic illness. The purpose of this study was to examine the effects of a therapeutic recreation based summer camp on social self-efficacy levels and social performance with peers among adolescents with chronic illness.

Seventy-nine campers, ages 11 to 22, participated in two different sessions of summer camp for adolescents with chronic illness. All participants were currently diagnosed with Neurofibromatosis, a specific form of chronic illness. Campers were assigned to attend 1 of 2 weeks of summer camp at Camp Kostopulos in Salt Lake City, Utah. The first week followed the traditional Camp K Model and the second followed the therapeutic recreation process (assessments, planning, implementation, evaluation, and documentation). The Social Self-Efficacy scale was used to measure social self-efficacy at the beginning and end of each week of camp. An adapted version of the Social Skills Questionnaire was used daily to measure social performance. Controlling for pretest levels, an ANCOVA was used to compare the results from the Social Self-Efficacy scale

week 1 with the results from the Social Self-Efficacy scale week 2. Alpha was set at .05. Repeated measures ANCOVA was used to compare the results of the social performance scores gathered from the Social Skills Questionnaire. The day 1 pretest was used as a covariate.

The first hypothesis was that summer camp programs utilizing therapeutic recreation programming to increase social self-efficacy among adolescents with chronic illness will be more effective at increasing social self-efficacy than summer camp programs not utilizing therapeutic recreation. This hypothesis was not supported.

The second hypothesis was that participants in the therapeutic recreation based summer camp session would exhibit a greater increase in social performance with peers over the traditional summer camp session. The second hypothesis was supported by statistical analysis.

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INTRODUCTION

The purpose of this study was to examine the effects of a therapeutic recreation based summer camp on social self-efficacy levels and social performance with peers among adolescents with chronic illness. A chronic illness is defined as a group of health conditions which persist for an extended duration of time, typically at least 3 months and oftentimes for the remainder of the individual's life. Examples of chronic illnesses include cancer, heart disease, autoimmune disorders, respiratory tract diseases, diabetes, Fibromyalgia, Neurofibromatosis, asthma, and arthritis.

The period of adolescence is already a difficult social environment for many individuals. The adolescent body is going through periods of rapid physical growth, developing secondary sexual characteristics, and rapid growth in social and cognitive development occurs (Neinstein, 2001). These developmental problems associated with adolescence, are greatly magnified when the individual has a chronic illness (Boice, 1998). Repeated doctor visits, medical treatments and extended hospital stays all combine to limit the exposure an adolescent with a chronic illness has to various social situations. This limited exposure can delay or stunt the individual's social growth and can drastically limit their social development (Bluebond-Langner, Perkel, Gorertzel, Nelson, & McGeary, 1990), which in turn may lead to an increased occurrence of depression,

anxiety, and behavioral problems (Hamlett, Pellegrini, & Katz, 1992) for adolescents with a chronic illness.

All of these issues can lead an adolescent with a chronic illness to have a lower sense of social self-efficacy, or the belief that one can successfully perform a given social task or a behavior change (Bandura, 1977).The adolescent does not feel they have the same ability or control to develop meaningful social relationships, create new friendships, and excel in social settings as their peers. Social self-efficacy is vitally important to the social development of adolescents with chronic illness. Individuals who have an increased sense of social self-efficacy are more adept at various social performances such as a) instigating social conversations; b) developing, strengthening, and maintaining social relationships; and c) functioning in various social groups and social situations than individuals who exhibit low levels of general self-efficacy (Rapley & Fruin, 1999).

Past research has indicated that self-efficacy, including social self-efficacy, is strongly connected with numerous health related outcomes, such as an increase in life satisfaction (Hampton, 2000), a decrease in both hospital visits and the duration of those visits (Horn, Yoels, Wallace, Macrina, & Wrigley, 1998), and an increase in overall functioning (Rejeski, Miller, Foy, Messier, & Rapp, 2001). These benefits come from an increase in social self-efficacy, which can be strengthened in four different ways through a) performance accomplishments, b) vicarious experiences, c) verbal persuasive messages, and d) physiological signals (Bandura, 1997). Research indicates that both fields of therapeutic recreation and the summer camp industry are effective sources for increasing social self-efficacy for adolescents with chronic illnesses (Harrison & McGuire, 2008; Melzer & Rourke, 2005).

For several years, summer camps have played an important and valuable role in addressing many of the issues that affect adolescents with a chronic illness (Winfree, Williams, & Powell, 2002). Summer camps for adolescents with chronic illnesses have been shown to help increase their levels of self-worth and social acceptance (Melzer & Rourke, 2005) while also providing the invaluable experience of associating with other individuals in similar situations. In many instances, these associations are the only opportunity adolescents have to interact with other individuals of their same age and with similar medical situations, outside of the hospital setting. Furthermore, summer camps help increase social self-efficacy and social performance by providing positive social situations, fostering independence, and providing opportunities for leadership experience (Thurber, Scanlin, Scheuler, & Henderson, 2007).

Similarly, therapeutic recreation has also been shown to be an effective tool for increasing social self-efficacy and social performance. Past research has identified therapeutic recreation as the main modality used to help decrease depression and increase social self-efficacy (Maughen & Ellis, 1991). Additional research by Tate and Ellis (1997), Wise and Hale (1999), Autry (2001), and Harrison and McGuire (2008) reported increased self-efficacy levels due to therapeutic recreation interventions. These interventions were successful because they all followed the therapeutic recreation process of assessments, planning, implementation and evaluation; and because they all utilized multiple sources of social self-efficacy information (i.e., performance accomplishments, vicarious experiences, verbal persuasion, physiological signals).

Although increased levels of social self-efficacy and social performance have been shown to be outcomes of both the summer camp setting and therapeutic recreation

interventions, it is not known if the combined effect of both of them working together would provide any further increases in social self-efficacy and performance. It is also a possibility that their individual unique qualities would negatively interact with each other and potentially lead to a decrease in social self-efficacy. Additionally, due to the unique nature of dealing with adolescents with a chronic illness, there may be some unforeseen factors that adversely affect an individual's social self-efficacy level. Therefore the purpose of this study is to examine the effects of a therapeutic recreation based summer camp on social self-efficacy levels and social performance with peers among adolescents with chronic illness.

LITERATURE REVIEW

Chronic Illness

Chronic illness is a term given to a group of health conditions that persist for an extended duration of time, typically at least 3 months and oftentimes for the remainder of the individual's life. These conditions affect the individual's daily life and require either home health care or frequent hospital visits. According to the Centers for Disease Control and Prevention, as of 2005, 7 out of 10 American deaths are attributed to chronic illnesses. Furthermore, 133 million Americans, almost one out of every two adults, have had at least one form of a chronic illness in 2005. When looking specifically at adolescents with chronic illness the numbers greatly vary depending on how past researchers have defined chronic illness. By some accounts as many as 6-10% of American adolescents have some form of a chronic illness (Boice, 1998; Neinstein, 2001). Even by conservative estimates, this indicates that at least two million adolescents in the United States of America have some form of a chronic illness.

Adolescence can be a difficult period of time for many individuals, especially for individuals with a chronic illness. One of the major concerns during this time period relates to social acceptance. Already an issue for adolescence, social acceptance can be greatly impacted when the individual may have to spend large periods of time in the hospital, at doctor's offices, and during treatments. This time is often spent in isolation or in the reluctant company of adults, which can lead to further social rejection from their

peers. It is because of these issues and the potential for social isolation that the caring of adolescents with a chronic illness must "go beyond the strictly medical; it should include addressing issues such as development, family and social support" (Neinstein, 2001, p. 1).

A diagnosis of a chronic illness necessitates drastic lifestyle changes, which may include modifying and adapting to new lifestyles as well as learning new behaviors to care for the illness. Individuals have to learn how to adjust socially and psychologically to living with the illness. They are not only exposed to traditional daily stressors, but also to illness-related stress (Nelms, 1989), along with the challenges that normal teenagers undergo, while learning how to manage their illness (Magrab, 1985). These changes can affect nearly every aspect of their lives. It changes their perceptions of who they are and what they can do (Bluebond-Langner et al., 1990). Research indicates that unless these challenges are handled with care and managed effectively, they can lead to a decrease in self-concept (Breslau, 1985), as well as depression, anxiety, and other mental health situations that can result in a loss of self-perception and an increase in behavior problems (Hamlett, Pellegrini, & Katz, 1992). In addition to various medical factors, chronic illnesses deprive children and adolescents of control over their typical daily routines, privacy, and relationships, which can lead to a decrease in overall life satisfaction, a decrease in one's ability to manage his or her own health care process, as well as isolation amongst their peer groups.

To successfully manage a chronic illness, an individual has to be able to carry out specific tasks that are designed to control symptoms and avoid complications associated with their illness. These tasks that make up self-care or self-management have been

described as a set of skilled behaviors that an individual must actively engage in to manage their own illness (Goodall & Halford, 1991). Examples of self-care include injections, self-exams, using a catheter, or other various medical treatments. Oftentimes this is one of the most troublesome initial components of living with a chronic illness, the sudden adaptation to new lifestyles and new forms of self-care. These self-care tasks, which are vital to the health of the individual, can potentially be embarrassing, time consuming, and/or painful, all of which can lead to further isolation and social rejection.

Past research has indicated that chronic illnesses, in addition to various medical conditions, can severely delay an individual's normal development, particularly in children and adolescents (Boekaerts & Roder, 1999**)**. A diagnosis of any type of severe chronic illness also leads individuals to have a heightened risk of emotional and behavioral problems (Witt, Riley, & Coiro, 2003), while also causing extreme fear and psychological trauma to members of the family of the individual diagnosed (Weaver & Flannelly, 2004). Chronic illnesses have also been shown to create intense feelings of anxiety, confusion, depression, and helplessness (Janoff-Bulman, 1989; Venning et al., 2007). Having a chronic illness also affects secondary aspects of an adolescent's life, such as poor school attendance (Sturge et al., 1997), increased parental overprotection (Anthony, Gil, & Schanberg, 2003), and increased problems in social interactions (Rodenburg et al., 2005), all of which can lead to further social rejection and isolation amongst their peers.

These issues can lead an adolescent with a chronic illness to have a lower sense of social self-efficacy, or the belief that one can successfully perform a given social task or a behavior change (Bandura, 1977). The adolescent does not feel they have the ability or

control to develop meaningful relationships, create new friendships, or excel in social settings as their peers.

This leads one to believe that adolescents with a chronic illness who have higher levels of social self-efficacy will be more likely to make the necessary adaptations to their lifestyles to actively engage in creating meaningful social relationships, whereas adolescents with chronic illnesses who have lower levels of social self-efficacy are more inclined to view their own social relationships as something beyond their control and are less likely to take active steps to promote or strengthen those relationships. It is believed then, that an adolescent diagnosed with a chronic illness will better create and foster stronger social relationships if they have higher levels of social self-efficacy, than an adolescent with lower or decreased levels of social self-efficacy.

Social Self-Efficacy and Social Performance

Self-efficacy is a construct of Albert Bandura's social cognitive theory (1986), which describes human behavior as resulting from interactions of several factors: personal, environmental, and behavioral. Personal factors inhabit the individual and include the constructs of self-efficacy and self-regulation, as well as biological factors like height, weight, and hormones (Wise, 2002). Environmental factors occur outside the individual, including influences from other individuals, the weather, and the physical environment. Behavioral factors are those activities and actions conducted by the individual. These behavioral factors or social performances are the behavioral manifestations of social self-efficacy. As social self-efficacy increases so does performance in social settings (Bandura, 1997).

Bandura describes self-efficacy as “the belief in one’s capabilities to organize and execute the courses of action required to manage prospective situations” (1995, p. 2). An individual’s perception of self-efficacy influences what activities they may or may not attempt, how much time, resources, and effort they will put into the activity, and how long that individual will persist in that activity when trials and challenges are encountered. Individuals with higher levels of self-efficacy will attempt new activities, commit more time, effort, and resources to those new activities, and will participate in those activities for longer periods of time (Bandura, 1986, 1997).

Social self-efficacy is one aspect of self-efficacy. Social self-efficacy is vitally important to understanding how an individual will act in various social settings. Whether or not they will seek out new friendships, initiate conversations, develop and strengthen social relationships are all important aspects of social self-efficacy. Bandura indicates that self-efficacy beliefs, including social self-efficacy beliefs, can be affected and modified by four different sources of information: performance accomplishments, vicarious experiences, verbal persuasive messages, and physiological signals (1986, 1997). Social self-efficacy beliefs can be strengthened or weakened by how the information was received from each source.

Performance accomplishments, also known as enactive attainment, are the most significant sources of information to increase social self-efficacy because they provide direct support of personal competence (Bandura, 1997). Performance accomplishments refer to the actual successful completion of difficult social tasks that result in strengthened feelings of competence and mastery of that specific task. Usually, efficacy

is strengthened if the performance of a behavior is successful. Conversely, efficacy is weakened if that performance is unsuccessful.

The second source of information, vicarious experiences, occurs when an individual observes a model perform a specific behavior (Bandura, 1997; Wise 2002). If the model possesses similar characteristics (e.g., gender, culture, disability, ability level) and is successful at the desired social task then the observer may think to themselves, “If they can do it, then so can I” and then their self-efficacy increases. However, if the same model fails at the desired social task then the observer may think to themselves, “If they can’t do it, then there is no way I can do it” and then their social self-efficacy decreases. Additionally, individuals benefit more from vicarious experiences when the model demonstrates perseverance over difficulties, rather than mastering an activity effortlessly (Bandura, 1997).

Another source of social self-efficacy information is verbal persuasion. Through verbal persuasion, an individual’s efficacy may be strengthened when a respected, competent, and knowledgeable mentor expresses their belief in the individual’s ability to complete the desired social task successfully (Bandura, 1997). When the mentor is optimistic about the individual’s performance in the desired task, then social self-efficacy should be strengthened. Conversely, when the mentor expresses doubt or uncertainty in the individual’s ability to complete the desired task, social self-efficacy may be weakened.

The last source of social self-efficacy information and the least effective is physiological signals. When an individual experiences an increase in heart rate and sweat production, they can interpret those signals in two different ways that can either

strengthen or weaken social self-efficacy (Bandura, 1997). When those signals are viewed as indicators of lack of ability and future failure, social efficacy is weakened. When those signals are viewed as the body's preparation for performance, then social efficacy can be strengthened.

Benefits. Numerous past studies have indicated that social self-efficacy is linked with several health related outcomes. Individuals with stronger perceptions of social self-efficacy predict increased life satisfaction (Hampton, 2000), increased psychological wellbeing, and a decrease in both hospital visits and the duration of those visits (Horn, Yoels, Wallace, Macrina, & Wrigley, 1998; Lou, Dai, & Catanzaro, 1997) in individuals recovering from spinal cord injuries. Social self-efficacy has also been found to be a reliable indicator of successful recovery from surgery (Orbell, Johnston, Rowley, Davey, & Espley, 2001), functioning in senior citizens (Rejeski, Miller, Foy, Messier, & Rapp, 2001), and in individuals who suffer from chronic low back pain (Lackner, Carosella, & Feuerstein, 1996). Individuals with increased levels of social self-efficacy improved faster and had increased levels of performance. Social self-efficacy has also been linked with enhancement of cardiovascular endurance among individuals suffering from chronic obstructive pulmonary disease (Toshima, Kaplan, & Ries, 1990) and increased motivation for individuals with diabetes to actively participate in their own necessary self-care tasks (Williams & Bond, 2002).

Focusing specifically on adolescents, social self-efficacy has been positively linked with favorable psychological, social and behavioral outcomes and performances; while being negatively linked with unfavorable outcomes among adolescents (Kumar & Lal, 2006; Passmore, 2004; Wang & He, 2002). Increased levels of social self-efficacy

have predicted increased joy among adolescents in middle school settings (Natvig, Albrektsen, & Ovarnstrom, 2003). A lower sense of social self-efficacy among adolescents has also been shown to lead to greater rates of depression, lower life satisfaction, and less overall optimism towards life in general. Further research indicates that increased adolescent social self-efficacy levels, in relation to managing their own emotions, contributes to favorable expectations about their future, and leads to an increase in self-esteem and life satisfaction (Caprara, Steca, Gerbino, Paciello, & Vecchio, 2006).

Measures. To accurately measure social self-efficacy it is important to understand the various social self-efficacy scales that are available. Over the years, several researchers have developed various social self-efficacy scales including Wheeler and Ladd (1982), Connolly (1989), Patrick, Hicks and Ryan (1997) and Muris (2001). Each of them has specialized in some particular aspect of social self-efficacy and all rely on self-reporting, which has potential problems due to inaccurate self-perceptions on the part of the participant. Wheeler and Ladd looked into the role of social forms of self-efficacy when dealing with peer interactions. Connolly's scale examines social self-efficacy in the light of social adjustment, and Patrick, Hicks and Ryan's scale explores the relationship between social self-efficacy and academic self-efficacy. Finally, Muris's scale examines the ability of adolescents to produce meaningful social interactions while navigating social situations.

The Children's Self-Efficacy for Peer Interaction Scale (CSPI) created by Wheeler and Ladd (1982) was intended to test third-grade to fifth-grade student's perceptions of their ability to carry out social actions in specific situations involving their peers. The

items included on the scale describe specific social situations such as joining a game or activity and acting assertively in hostile peer situations. This scale focuses on children ages 7 to 10 in a school setting.

The Connolly (1989) measure, the Social Self-Efficacy Scale, utilizes a 7-point Likert-type scale, which ranges from "impossible to do" to "extremely easy to do." This scale seems to have very similar types of social tasks with similar levels of difficulty. For example, tasks such as “asking someone over to your house” and “asking someone to go to a movie.” These two items appear to be measuring almost identical tasks. Some of the items on this scale did not clearly indicate any actual task. For example, the item “be involved in group activities” does not indicate what the word “involved” implies. Involvement can range from simply being with the group, to leading and directing the group activities. This scale focuses on the levels of social self-efficacy, but does not seem to present those levels very clearly.

The Patrick, Hicks, and Ryan (1997) scale asks students to rate how true it is that they could perform a given social task. The authors use a 5-point Likert scale with answers ranging from “not all true” to “very true.” This scale utilizes quite specific items, such as starting a conversation with a classmate. This scale also appears to be predominately for younger students in a classroom setting.

The Muris Social Self-Efficacy Scale (2001) requires the youth to rate how well they can complete various social tasks on a 5-point Likert scale. The answers range from “not very well” to “very well.” This scale is a school based scale aimed at adolescents ages 14 to18 or grade levels 8^{th} through 12^{th}. It also reports a high level of reliability, with alpha being .85. It is believed that the Muris Social Self-Efficacy Scale would be the

best fit for adolescents with chronic illnesses because it has a high level of reliability, targets the desired age range of adolescents, and measures social self-efficacy.

Summer Camp

According to Winfree, Williams, and Powell (2002), one tool that has been recognized as extremely valuable in addressing many of the issues that plague adolescents, particularly those with a chronic illness, is the summer camp experience. For over 80 years, summer camps have been a critical component in self-care management and education for children and adolescents with diabetes (diabetes summer camp). Additional studies have found that summer camps designed for specific types of chronic illness can help increase the campers' knowledge of their own illnesses (Bluebond-Langner et al., 1990; Harkavy et al., 1983), increase the campers desire to follow their medical regimen during camp (Spevack, Johnson, Riley, & Silverstein, 1989), increase positive attitudes toward their various chronic illnesses, help diminish trait anxiety, and help develop meaningful social relationships (Briery & Rabian, 1999), as well as providing valuable respite care for the individuals families (Meltzer & Johnson, 2004).

A recent study examining the impact of social relationships at a summer camp for children with chronic illnesses found several positive outcomes. Among others, they found that adolescents with a chronic illness in a summer camp setting experienced increased levels of social acceptance, global self-worth, and were more comfortable with their physical appearance (Melzer & Rourke, 2005). Summer camps for adolescents with chronic illness also gave those individuals the opportunity to interact with other kids their same age who were going through similar situations. Summer camps allow adolescents

with a chronic illness the rare opportunity to engage in social relationships with peers who have had similar experiences. These relationships can help adolescents with chronic illnesses relate to one another and share methods of coping, adjustment, and help reduce negative side effects associated with their illness (Melzer & Rourke, 2005).

Past research has also shown that residential camps can help adolescents increase social self-efficacy by providing enriching social encounters, helping the campers to gain independence, and by providing leadership opportunities (Thurber, Scanlin, Scheuler, & Henderson, 2007). Summer camps can help encourage powerful social self-efficacy beliefs through fostering meaningful social relationships, engaging in mental challenges, and experiencing various outdoor activities. Summer camps can also serve as a valuable environment to teach campers about acceptance, friendship, optimism, and positive social relationships (Thurber et al., 2007), all of which can lead to increased social self-efficacy.

At summer camps for adolescents with chronic illnesses these individuals can, perhaps for the first time in their lives, truly be themselves. In this setting, they do not have to worry about how they look, what the other kids will think when they need an injection or need to take various medications, and they know their camp peers will understand when they are not feeling well (Melzer & Rourke, 2005). This positive, safe, social environment is a prime setting for adolescents with chronic illnesses to experience any number of Bandura's four sources of information that can strengthen social self-efficacy.

In a summer camp setting, providing participants with the opportunity to have success in a certain task, witness their peers who have similar health related issues succeed at given tasks, as well as receive targeted, specific feedback about their personal

skills and abilities in a particular activity can reaffirm an individual's competence in that area. By doing so, a summer camp setting can help strengthen and increase the individual's social self-efficacy (Bandura, 1997). This increase in social self-efficacy can then help lead the camper to feel they have a greater control over their personal lives as well as an increase in their perceived competency, ability, and social relationships, all of which are vitally important to adolescents, particularly those with a chronic illness.

It is evident from the literature that an increase, or strengthening, of social self-efficacy can lead to various positive outcomes for children and adolescents with a chronic illness. In addition to the summer camp experience, past literature encourages the use of Bandura's theory of self-efficacy in the field of therapeutic recreation, and states that it has been used as a valid and sound foundation for treatment for at least the last 25 years (Wise, 2002).

Therapeutic Recreation

The American Therapeutic Recreation Association (ATRA, n.d.) defines therapeutic recreation as:

> Recreational therapy, also referred to as therapeutic recreation, utilizes various activities as a form of active treatment to promote the independent physical, cognitive, emotional and social functioning of persons disabled as a result of trauma or disease, by enhancing current skills and facilitating the establishment of new skills for daily living and community functioning.

The literature has suggested that the implementation of therapeutic recreation services can be effective in diminishing the initial symptoms of an illness or disability, and assist in the promotion of continual individual health care, independence, and quality of life (American Therapeutic Recreation Association, n.d.). Therapeutic recreation services can

also lead to favorable health outcomes in a variety of lifestyle domains, while also aiding in the client's ability to effectively cope with their disability and return to a fruitful and individually meaningful life (American Therapeutic Recreation Association, n.d.).

The theory of self-efficacy applies to the field of therapeutic recreation (TR) for a variety of reasons, including the two following primary reasons. First, many TR outcomes directly coincide with self-efficacy, including social self-efficacy, and the role it plays in many health promoting behaviors (Wise, 2008). If the outcomes of TR align with the various roles self-efficacy plays in individual's health promoting behaviors, it then makes sense for the field of TR to adopt self-efficacy as a framework for its practice. Second, social cognitive theory, which includes self-efficacy, has been widely adopted as a guiding theory for the field of TR (Caldwell, 2009; Wise, 2008).

By using social cognitive theory and self-efficacy as a framework, a Certified Therapeutic Recreational Specialist (CTRS) can set realistic goals and objectives, based upon a thorough assessment, then implement the treatment plan to help the participant reach outcomes that are "applicable to real-life situations" (Richeson, Croteau, & Jones, 2004, p. 12).

Past research has shown several positive outcomes through applying self-efficacy to various TR programs. Maughan and Ellis (1991) found that adolescents with depression had significantly higher efficacy scores after the TR intervention than those without the intervention. Tate and Ellis (1997) found that successfully mastering initiative based activities for individuals with mental health disorders produced increased self-efficacy. Wise and Hale (1999) found similar increases in self-efficacy in their work with an individual with a spinal cord injury in a therapeutic recreation based weight

lifting program. Autry (2001) found that the participants of a 4-day adventure therapy program showed improved self-efficacy by the end of the program. Harrison and McGuire (2008) found that using vicarious experiences in a TR intervention was an effective tool for increasing self-efficacy. Based upon this research, therapeutic recreation is uniquely qualified to assist individuals in strengthening their social self-efficacy.

By following the TR process (assessment, planning, implementation, evaluation, and documentation) and utilizing Bandura's theory of self-efficacy a Certified Therapeutic Recreational Specialist (CTRS) can help facilitate an experience that can lead an individual to experience a greater sense of self-efficacy. This can be done through proper assessment of the individual and by implementing the four principal sources of self-efficacy described by Bandura (1997) as mentioned earlier: performance accomplishments, also known as enactive attainment; vicarious experience; verbal persuasion; and physiological signals.

Based upon the assessment, individual goals and objectives will be developed for the participant by the CTRS. Each objective will contain a specific behavior, criteria to measure the behavior, and a condition for that behavior to occur. These objectives will be written to incorporate at least one source of social self-efficacy information.

A CTRS should first focus on ensuring that the individual can accomplish the identified action, as performance accomplishments are so influential towards strengthening social self-efficacy (Wise, 2002). A CTRS can do so through proper task analysis, an accurate and thorough interview assessment of the individual, realistic and measureable goals and objectives, and an individualized treatment plan. As needed, the CTRS may provide aids to the participant; however, as the individual begins to show

signs of mastery of the task those aids should be removed (Bandura et al., 1975). A CTRS may also use debriefing sessions to help their clients reflect back upon their successes during a particular activity. These debriefing sessions are valuable tools to help the clients realize their performance accomplishments.

When actual behavior is prohibited by injury, illness, or disability; vicarious experiences can be very powerful at strengthening social self-efficacy (Wise & Trunnell, 2001). The CTRS can act as a model or example for the individual. When doing so the CTRS should verbalize their actions, tactics, and problem solving strategies (Gould & Weiss, 1981). It is also helpful to have peers act as models. By observing others with similar illnesses deal with various social situations, the client is better able to realize, "if they can do it, then so can I". Another form of vicarious experience that a CTRS might utilize is that of mental imagery (Bandura et al., 1980). The CTRS can help teach the individual how they can visualize themselves accomplishing the desired tasks.

In order for a CTRS to effectively utilize the third source of social self-efficacy information, verbal persuasion, they need to be competent in the behaviors and tasks they teach (Wise, 2002). In an effort to increase their credibility, a CTRS can utilize additional sources of confirmation, such as checklists and completed projects. They also want to make sure their messages provide specific targeted feedback immediately after the desired task is performed (Schunk & Swartz, 1993; Wise & Trunnell, 2001). When those tasks are accomplished, the CTRS wants to give feedback that links the success directly back to the client and their actions (Wise & Trunnell). When those tasks are not accomplished, the CTRS wants to give feedback that links that failure to outside factors, such as the environment or weather conditions (Wise & Trunnell). For example the

CTRS could say, “Great job, Johnny. The wind was just too strong today; otherwise you would have made that throw.” However, it is important to always be honest and truthful with these statements, never exaggerating a point just to make a positive statement.

There is little research in the literature which measures how a CTRS should utilize the last source of self-efficacy information, physiological signals. However, Wise does state that a CTRS should “become knowledgeable about various possible causes of physiological signals such as fatigue, aches, pains, sweaty palms, racing heart rates, and ‘butterflies’ in the stomach” (2002, p. 8). With this knowledge base, a CTRS can correctly interpret physiological signals and offer the individual reasonable explanations that can mitigate any potentially negative impacts on social self-efficacy.

Therefore, summer camp programs that employ the therapeutic recreation process to address deficiencies in social skills among adolescents with chronic illness should prove to be more successful than summer camp programs that do not utilize therapeutic recreation programs. Specifically, this entails combining the TR process (assessment, planning, implementation, evaluation, and documentation) with the four sources of self-efficacy information (performance accomplishments, vicarious experiences, verbal persuasion, and physiological signals) to target and strengthen the individual’s social self-efficacy levels. Consequently, the purpose of this study was to examine the effects of a therapeutic recreation based summer camp on social self-efficacy levels and social performance with peers among adolescents with chronic illness.

H1: Summer camp programs utilizing therapeutic recreation programming to increase social self-efficacy among adolescents with chronic illness will be more

effective at increasing social self-efficacy than summer camp programs not utilizing therapeutic recreation.

H2: In addition to self-reported social self-efficacy measures, participants in the therapeutic recreation based summer camp session will exhibit a greater increase in social performance with peers over the traditional summer camp session.

METHODS

The purpose of this study was to examine the effects of a therapeutic recreation based summer camp on social self-efficacy levels and social performance with peers among adolescents with chronic illness. This chapter will discuss the sample, setting, procedures, and data analysis used in this study.

Sample

Two groups of adolescents, 35-45 per group, with the same type of chronic illness, comprised the sample for this research. These campers were attending a specialty summer camp called Camp Kostopulos in Salt Lake City, Utah. They came from across the country, from a variety of socio-economic backgrounds, and were between the ages of 13 and18 years.

The specific form of chronic illness that was of interest in this study was that of Neurofibromatosis. Neurofibromatosis (NF) is a genetic disorder that affects about 1 in every 3,500 individuals (North et al., 1997). Even though its name is not well recognized, it is a more common chronic childhood illness than cystic fibrosis, Duchenne muscular dystrophy, and Huntington's disease combined. In many aspects, the social problems and lack of social self-efficacy exhibited by adolescents with NF are closely related to the social problems exhibited by adolescents with other forms of chronic illness. These

problems included among others, social isolation, peer rejection, and over-protection by parents.

NF is classified by three distinct disorders: Neurofibromatosis 1 (NF 1), Neurofibromatosis 2 (NF 2), and Schwannomatosis. NF is characterized by small tumors that grow on the ends of nerves throughout the body. NF is a life-long genetic disorder that is usually diagnosed in early childhood and brings with it a host of secondary complications, such as bone deformities, learning disabilities, café-au-lait spots, cardiovascular problems, gradual hearing loss, and chronic pain (Noll et al., 2007). The causes of each type of NF are not yet fully explained, but most research indicates it is due primarily to genetic defects that are either passed from parent to child or occur randomly at conception. NF 1 is caused by a mutation on chromosome 17. The mutation causes a loss of a protein called neurofibromin, which results in tumors on the ends of nerve cells (Viskochil, 2002). NF 2 is caused by a defect located on chromosome 22. This defect causes a loss of a protein called merlin, which leads to uncontrolled cell growth (Hanemann, 2008). The cause of Schwannomatosis is still mostly unknown; research has hinted at a link with certain genes, but it is still under scrutiny.

There is no cure for Neurofibromatosis. NF also has a variety of potentially painful and debilitating side effects. As every case of NF is different, each patient must learn to live with their own particular medical treatments, which may include daily injections, medicine management, or hospital visits. Individuals with NF must also endure dozens of yearly medical appointments, keep up-to-date on new research and treatments, as well as deal with the physical characteristics of NF. These physical characteristics of NF, including tumors, growths and cafe-au-lait spots, can lead to peer

rejection and social isolation. In addition to physical changes, the tumors can also result in various cognitive impairments. This decrease in cognitive functioning adds another barrier to cultivating meaningful social relationships and can lead to a further decrease in social self-efficacy.

Setting

The specialty camp for these individuals is Camp Kostopulos, otherwise known as Camp K. Camp K is part of the Kostopulos Dream Foundation, a year-round organization that has provided educational, recreational, and cultural opportunities for children, adolescents, and adults with a variety of physical and cognitive impairments since 1967. It is located on 25 acres of land just east of Salt Lake City, Utah. Each year Camp K partners with the Children's Tumor Foundation to host two camp sessions for 35-40 adolescents with NF from across the country. They are the world's sole provider of NF specific summer camps for adolescents. These camp sessions are 7-day sessions and provide a variety of summer activities including horseback riding, high and low ropes course, initiative based activities, swimming, field games, hikes, field trips to a water park and to historic Park City, Utah.

The purpose of Camp K's summer programs is "to provide a summer camp that promotes a healthy recreation and leisure lifestyle." It does that by first providing traditional and nontraditional summer camp activities adapted for individuals with disabilities or illnesses; second, by providing instruction in the skills, knowledge, and attitudes related to outdoor activities; third by providing a 5-day respite care for families and caregivers; and fourth by increasing social self-efficacy, building relationships, and

reducing barriers through social interactions (Ethington & Allsop, 2010). Due to Camp K's unique relationship with adolescents with NF, their own goals to help increase social self-efficacy, their convenient location, and the researcher's relationship with the Kostopulos Dream Foundation, they were the ideal partner for this research.

Consent

Research participants were informed of the nature of this study through an invitational mailing that was included in their acceptance to camp letter. This mailing contained all necessary information regarding the purpose of the research study, data collection procedures, any potential benefits or side effects of the study, provisions in the study to preserve confidentiality, a parental permission form and a consent to participate form, that was approved by the human subject review board. It also clearly stated that participation was voluntary and would in no way affect their acceptance into camp. Campers who signed up for the study had this information restated to them on the first day of camp.

Measures

To test hypothesis 1, the instrument that was used for this study was the Muris Social Self-Efficacy Scale (SSES) (2001) (see Appendix A for detailed explanation of appendices; see Appendix B for a copy of the SSES). The SSES asked eight questions about social self-efficacy on a 5-point Likert scale. The answers ranged from "not very well" to "very well." The scale was originally designed for classroom settings and had to be slightly altered to account for the different environment. The extent of the alteration

was limited to changing the term “classmates” to “youth your age” on two questions. To test hypothesis 2, the adapted version of the Social Skills Questionnaire (SSQ) (Levinson, 2004) was also used. This system is used by Camp K daily to compare the camper’s social performance with other peers (see Appendix C for a copy of the Camp K SSQ). The extent of the adaptation was replacing child and peers with camper and campers, as well as replacing school with camp.

Study Procedures

The first session of camp served as the control group. This session was run following the traditional Camp K Model. The SSQ was administered daily, no goals or objectives were created for the campers and programs were designed to provide an enjoyable experience for the campers (see Appendix D for a complete schedule of the traditional Camp K Model). No changes were made to the session, with the exception of administering the SSES upon arrival and immediately prior to departure. The second session of camp, the Therapeutic Recreation (TR) Process Model, followed the TR process throughout the session. This included TR assessments for each participant, measureable goals and objectives, targeted program plans within the same program activities as the first session, and proper evaluation and documentation of all participants and programs (see Appendix D for a complete schedule of the TR Process Model). The term TR Process Model is used to simply differentiate between the 2 weeks of camp and does not refer to a TR model of practice.

Therapeutic recreation assessment. The therapeutic recreation (TR) assessments were conducted using the Kostopulos Dream Foundation (KDF) assessment,

which was a combination questionnaire and interview (see Appendix E for a copy of the assessment). These assessments were only conducted during the TR Process Model. This assessment is currently used by KDF's recreational therapists in their off season programs, but is not currently used during their summer camp programs. Assessments were conducted by two trained, nationally certified (Certified Therapeutic Recreational Therapist, CTRS) and Utah state licensed (Therapeutic Recreational Specialist, TRS) recreational therapists, from the Kostopulos Dream Foundation (KDF) and by seven therapeutic recreation (TR) interns. These TR interns were in the final stages of their internship and were trained in using the assessment. They were under the observation of their primary internship supervisor. They also had completed a skills checklist based upon the National Counsel for Therapeutic Recreation Certification (NCTRC, n.d.) job task analysis. For the purpose of this study, the term recreational therapist refers to both a CTRS and a TR intern. The assessment established a relationship between the camper and the recreational therapist. It also gathered important information about the camper's social self-efficacy, particularly areas of strength and areas that needed improving. The assessment assessed the campers' physical, mental, social, behavioral, and emotional status, focusing primarily on the social aspect. Topics and questions related to social self-efficacy were discussed. Topics and questions included how the client felt about making friends, initiating conversations, building meaningful relationships, typical social situations that they found difficult or awkward, who they turn to for help, and how they felt about their current social relationships. To ensure the client offered as much information as possible these questions were open-ended and the interview was

conducted in a nonthreatening, comfortable, and safe environment. Assessments were conducted within 2 hours of the camper's arrival and lasted between 30-50 minutes.

The recreational therapist took notes throughout the interview and took care to record any and all relevant information. The assessment informed the recreational therapist what types of activities the camper could participate in and what assistance they needed in those activities. This also gave the recreational therapist an understanding of how the camper functioned in social situations and what could be done to help strengthen their social self-efficacy. The pretest of the SSES was also collected at this time, which also provided valuable information for the recreational therapist.

In addition to the interview assessment, the recreational therapist also conducted an observational assessment of the campers (see Appendix E for a copy of the assessment). The observational component of the assessment was completed at the camper's first activity, but was also ongoing throughout the week of camp. The goal of the observational assessment was to observe the campers in social situations and take notes on how they interacted in those situations. Observations were made on how the campers interacted in social situations, such as whether they initiated conversations or shied away from interactions, whether or not they could establish relationships, whether their illness held them back in social situations, how they reacted to disagreements, how they reacted to individuals of the opposite sex and whether or not they could maintain social relationships. Through observation the recreational therapist was able to identify how the camper interacted in a variety of social situations, and was able to evaluate social self-efficacy growth over the course of the entire session.

Planning the intervention. Based upon the result of the SSES, interview assessment, and the observational assessment, the recreational therapist created measureable goals and objectives for each camper. Goals were based upon social self-efficacy. Goals such as “upon completion of this session of camp, the camper will display at least two positive social interaction techniques as judged by the recreational therapist” or “by the end of this session of camp the camper will identify three new personal social strengths when asked by the recreational therapist” were set for each camper. Each goal was based upon accomplishing certain behavioral objectives.

Each behavioral objective contained a condition for the behavior, criteria to measure the behavior, and a specific behavior that was to be accomplished. These objectives were designed to assist the campers in achieving their overall goals. Behavioral objectives were written to account for multiple sources of social self-efficacy.

As performance accomplishments are the most powerful source of information to increase social self-efficacy, they were included in most of the behavioral objectives. Examples of behavior objectives for performance accomplishments included, “with prompting from the recreational therapist the camper will identify at least one situation where they overcame their social fears to initiate a conversation by session end,” “with aid from the recreational therapist the camper will discuss how they developed a new friendship by the end of the opening weekend of camp,” or “without help from the recreational therapist the camper will identify at least one new social interaction technique they learned while at camp.”

Behavioral objectives also utilized vicarious experiences to help strengthen social self-efficacy. Examples of behavioral objectives for vicarious experiences included,

"while observing a model express his or her opinion to fellow campers, the camper will identify one strategy that was used by the model to the recreational therapist by activity end" or "the camper will use mental imagery to visualize how they would act if they encountered an unfamiliar individual, and identify to the recreational therapist two social interaction techniques that they used."

Verbal persuasion was also integrated into behavioral objectives. This included behavioral objectives such as, "when asked by a recreational therapist the camper will identify one positive approach that they will perform during a given social interaction and why that approach will be successful," or "after difficult social interactions the camper will seek out advice from the recreational therapist, before the end of the activity, on how to deal with future social interactions at least 75% of the time."

Even though it was the least effective source of information to strengthen social self-efficacy and social skills, some behavioral objectives included components of physiological and emotional signals. One example of a behavioral objective accounting for physiological and emotional signals was, "before the activity begins the camper will discuss how they feel physically and/or emotionally about the upcoming social situation and identify two ways they will deal with that arousal when it occurs during the activity."

Implementation. Before every activity the recreational therapist introduced the activity, discussed the goals and objectives of the activity, and had a discussion with the campers about their general views and feelings towards the activity. The recreational therapist encouraged positive social interactions during the activity. They also provided instruction on any equipment that was used, went over safety concerns, and ensured that all campers felt safe and comfortable with each activity. Throughout the activity the

recreational therapists worked with groups and individuals to reach their goals and behavioral objectives. They used all four sources of information to strengthen social self-efficacy and social skills throughout the activity. They did this to help decrease negative stressors associated with social situations for adolescents with chronic illnesses and to encourage positive social interactions, all of which can lead to an increase in social self-efficacy and in social skills.

The recreational therapist used performance accomplishments to focus on the social successes a camper had. By focusing on these successes the camper could begin to understand what it takes to create and cultivate meaningful social relationships. These accomplishments bring about strong feelings of mastery and lead to an increase in social self-efficacy. As needed, the recreational therapist introduced aids to assist in the successful completion of a desired social task. Aids included note cards, direct guidance from the recreational therapist, and peer models to help guide the camper through a particular social situation. The recreational therapist also utilized debriefing sessions to reflect back upon the success of the activity. These debriefing sessions helped connect what campers have done during the activity to other situations in which they may find themselves in their daily life. The recreational therapist encouraged campers to discuss not only their accomplishments, but the difficulties they encountered and how they overcame those difficulties. Questions followed Bloom's Taxonomy (Anderson & Krathwohl, 2001), starting out with remembering, and then moving on to understanding, and finally to applying. Examples of questions used in a variety of activity situations included, "How did those around you help you complete this difficult activity?", "Why is it important to have people around us that support us?", "What did you do to help

someone else complete the activity?", "Why is it important to support those around us?", "What are some things that make it difficult to create meaningful social relationships?", "How have you conquered those difficulties during this activity?", or "What do the relationships you've gained mean to you?"

Vicarious experiences were also used in the implementation of all activities. By observing the other campers, individuals who were the same age, with the same illness, and similar abilities in social situations began to realize, "if they can create social relationships, then so can I." They were able to witness their peers not only having positive social interactions, but could witness them initiating those social interactions. This allowed the participant to see how similar individuals dealt with difficult or awkward social situations. When appropriate, the recreational therapist also acted as a model, demonstrating acceptable social interactions and tactics for dealing with particular situations.

Another form of social self-efficacy that was implemented in the activity by the recreational therapist was that of verbal persuasion. The recreational therapist provided targeted, specific, immediate feedback to each camper regarding effort, skill, successes, and future suggestions. Examples of feedback included, "You're really getting to know a lot of people here at camp," "You have an easy way of making friends with anyone," "That was awesome how you helped that other camper join the group," or "I know it's difficult to make new friends, but I can tell you are really stepping outside of your comfort level and making an effort. Keep it up." Comments such as these helped create a supportive environment in which the camper felt safe to ask for assistance or continued to have the confidence to create more social successes.

The last form of social self-efficacy information was physiological signals. These physical signals either notified the camper that they think they will fail or that they will succeed. To help decrease the feelings of failure it was important the recreational therapist helped the camper know it is okay to be nervous. It was important that the camper knew that even though an activity or social situation might seem difficult, it was a safe activity and a safe environment.

By utilizing these four sources of social self-efficacy information in the implementation stage of the camp session, the recreational therapist helped the campers strengthen their social self-efficacy. This was done by helping them to understand a) the benefits of social relationships; b) how to create and maintain those social relationships; and c) how to conquer the challenges that we all face in cultivating meaningful social experiences.

TR evaluation and documentation. Evaluation and documentation were conducted by the recreational therapists after every morning, afternoon, and evening activity or program (See Appendix D for specific times). These evaluations and documentation included both an activity/program evaluation (see Appendix F) and individual camper progress notes and evaluations (see Appendix G) for both sessions of camp. During the traditional Camp K Model the individual camper evaluations were based upon their general observed behaviors. During the therapeutic recreation process week of camp model the individual camper progress notes were based upon how well they completed their individual behavioral objectives created from their specific TR assessment. During both sessions of camp the recreational therapists also completed the SSQ for each camper at the end of each day. At the end of the each session of camp, the

SSES was readministered. At the end of the TR process session a discharge assessment was also conducted. It was believed that both models would show an improvement in social self-efficacy and social skills, but that the TR Process Model would show significantly more improvement on both the SSES and the SSQ over the duration of camp than the traditional Camp K Model.

Data Analysis

The data were analyzed using SPSS. Both descriptive and inferential statistics were utilized. Controlling for pretest levels, an ANCOVA was used to compare the results from the SSES session 1, the traditional Camp K Model, with the results from the SSES session 2, the TR Process Model. Alpha was set at .05. Repeated measures ANCOVA was used to compare the results of the social performance scores gathered from the SSQ. The day 1 pretest was used as a covariate. SSQ scores were reverse coded so improvements were represented by larger numbers for analysis.

RESULTS

The purpose of this study was to examine the effects of a therapeutic recreation based summer camp on social self-efficacy levels and social performance with peers among adolescents with chronic illness. Social self-efficacy was measured through the use of the Social Self-Efficacy Scale (Muris, 2001). The Kostopulos Dream Foundation adapted version of the Social Skills Questionnaire (Levinson, 2004) was also used to measure the camper's social performance.

Seventy-nine campers participated in this study. Session 1, the Traditional Camp K Model, had 35 campers who participated, while session 2, the Therapeutic Recreation Process Model, had 44 campers who participated. All participants completed both a Parental Permission Form (see Appendix H) and a Participant Assent Form (see Appendix I). All participants were diagnosed and were currently receiving treatment for either Neurofibromatosis 1 (NF 1) or Neurofibromatosis 2 (NF 2). Thirty-seven participants were female and 42 were male, ranging in age from 11 to 22, with a mean age of 15.87 years.

Hypothesis Tests

The first hypothesis was that summer camp programs utilizing therapeutic recreation programming to increase social self-efficacy among adolescents with chronic illness will be more effective at increasing social self-efficacy than summer camp

programs not utilizing therapeutic recreation. This hypothesis was not supported by these data ($p > .05$) (see Table 1). It is also clear through comparison of descriptive statistics that there was no significant difference in SSES from the Traditional Camp K Model to the TR Process Model (see Table 2).

The second hypothesis was that participants in the TR Process Model summer camp session would exhibit a greater increase in social performance with peers over the Traditional Camp K Model session. The second hypothesis was supported by statistical analysis (see Table 3 & 4). The time*model interaction was significant ($F_{4,71} = 9.868$, $p < .001$, $\lambda = .643$), indicating that improvement in social performance with peers improved more for the TR Process Model than for the Traditional Camp K Model. It is also clear through comparison of descriptive statistics that social performance with peers was statically significant ($p < .05$) within the time*model interaction (see Table 5). See Figure 1 for a plot of the social performance with peer's scores plotted for each day by model (Camp K vs. TR Process). The adapted SSQ is reverse scored so the lower the score the better. This figure clearly shows that the time*model interaction was statically significant ($p < .05$) as the TR Process Model scores show considerable improvement over the Traditional Camp K Model scores.

Controlling for pretest scores (Pre-SSES): no difference in SSE was evident between the TR Process Model and the Traditional Camp K Model. Controlling for day 1 social skills questionnaire, social performance with peers improved more in the TR Model than in the Traditional Camp K Model.

Table 1

ANCOVA Results for Hypothesis 1 - Social Self-Efficacy Post-Test Controlled for SSE Pretest

Dependent Variable: SSE

Source	Type III Sum of Squares	*df*	Mean Square	*F*	Sig.	Partial Eta Squared
Pre SSES (Covariate)	12.881	1	12.881	24.266	.000	.242
Model (Camp K vs. TR Process)	.059	1	.059	.112	.739	.001
Error	40.344	76	.531			
Corrected Total	53.406	78				

Table 2

Descriptive Statistics for Hypothesis 1 – Social Self-Efficacy – Post-Test

Groups	Marginal Mean	Std. Deviation	*N*
Camp K Model	3.8071	.78669	35
TR Process Model	3.9034	.86513	44
Total	3.8608	.82746	79

Table 3

ANCOVA Results for Hypothesis 2 *– Adapted Social Skills Questionnaire*

Between Subject Effects

Source	Type III Sum of Squares	Df	Mean Square	*F*	Sig.	Partial Eta Squared
Covariate	47.774	1	47.774	63.296	.000	.461
Model	6.171	1	6.171	8.176	.006	.099
Error	55.853	74	.755			

Table 4

Within Subjects Effects

Effect	*F*	Hypothesis df_1	Error df_2	Sig.	Partial Eta Squared	Observed Power
Time	.403	4.000	71.000	.806	.022	.138
time*Covariate	1.227	4.000	71.000	.307	.065	.365
time*Model	9.868	4.000	71.000	.000	.357	1.000

Table 5

Descriptive Statistics for Hypothesis 2 –Adapted Social Skills Questionnaire

	Groups	Est. Marginal Mean	Std. Deviation	N
Day 2	Camp K Model	2.8857	.68648	35
Total	TR Process Model	2.8476	.70234	42
	Total	2.8649	.69087	77
Day 3	Camp K Model	2.9543	.60017	35
Total	TR Process Model	3.1333	.65320	42
	Total	3.0519	.63196	77
Day 4	Camp K Model	2.9257	.55112	35
Total	TR Process Model	3.2476	.53339	42
	Total	3.1013	.56160	77
Day 5	Camp K Model	2.7943	.61641	35
Total	TR Process Model	3.4048	.42710	42
	Total	3.1273	.60167	77
Day 6	Camp K Model	2.7600	.75584	35
Total	TR Process Model	3.5714	.42957	42
	Total	3.2026	.72147	77

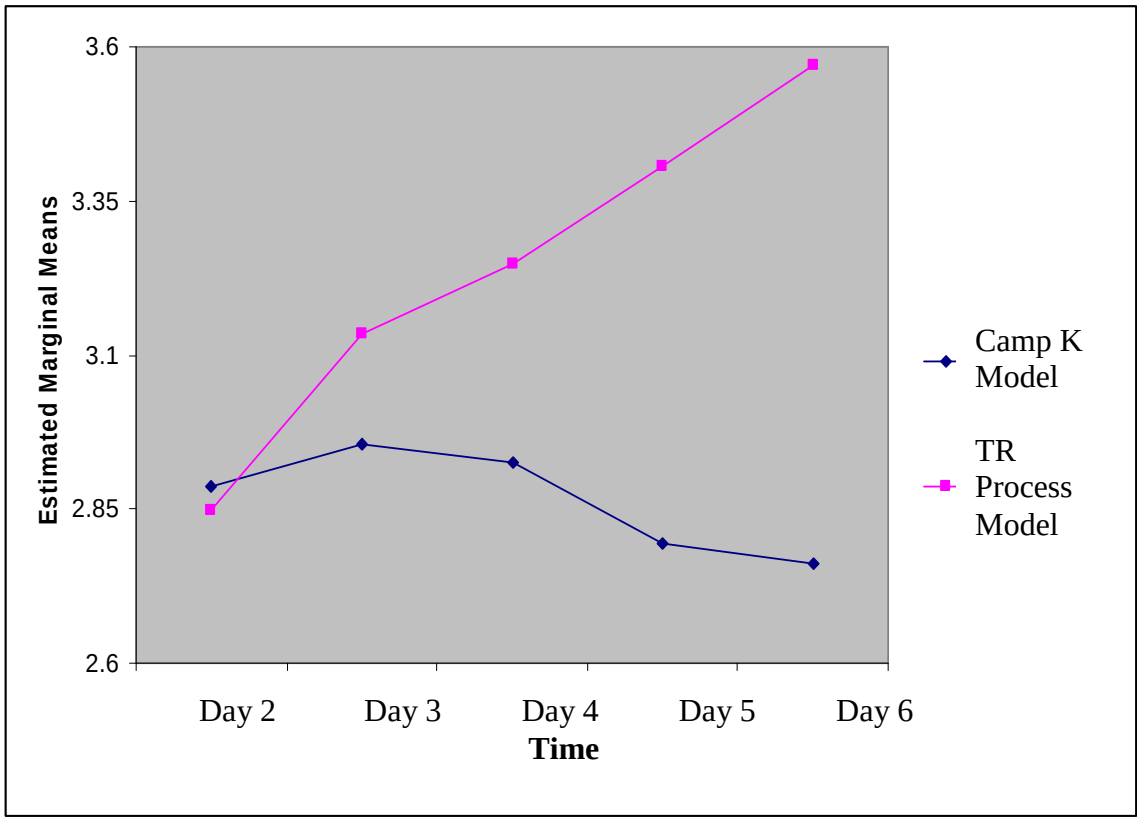

Figure 1 - Estimated Marginal Means of Adapted SSQ

DISCUSSION

As previously outlined, the purpose of this research was to examine the effects of a therapeutic recreation based summer camp on social self-efficacy levels and social performance with peers among adolescents with chronic illness. No evidence was found to support the first hypothesis, which was that summer camp programs utilizing therapeutic recreation programming to increase social self-efficacy among adolescents with chronic illness will be more effective at increasing social self-efficacy than summer camp programs not utilizing therapeutic recreation. However, the results did support the second hypothesis, which was that participants in the therapeutic recreation based summer camp session will exhibit a greater increase in social performance with peers over the traditional summer camp session. This chapter provides a summary of hypothesis testing, implications of this study, and the limitations of this study.

Hypothesis Testing

Hypothesis 1 was not supported. The treatment of a therapeutic recreation based summer camp appeared to have no impact on the participant's social self-efficacy levels over that of a traditional week of camp. This lack of statistical significance may be attributed to ineffective treatment and/or inconsistent self-reporting on the part of the participants. This does not appear to be consistent with existing literature. Thurber, Scanlin, Scheuler, and Henderson (2007) indicate that summer camps can help increase social self-efficacy by providing enriching social encounters, helping campers gain

independence, and by providing leadership opportunities. Melzer and Rourke (2005) also found similar results supporting the use of summer camps as a valuable tool to address social self-efficacy. In addition, Harrison and McGuire (2008) found that therapeutic recreation was an effective tool for increasing social self-efficacy.

This discrepancy may be due in part to the use of a self-report to measure for social self-efficacy. Inaccurate self-perceptions on the parts of the campers may have accounted for the lack of social self-efficacy growth. In addition, using only one measure, instead of multiple measures, may have helped lead to this discrepancy with existing literature. Another key difference between this study and those presented is the duration of time and the focus of each study. This study was limited to two sessions of 7 days each and explored a general understanding of social self-efficacy. Other studies were conducted over several weeks and months. They also explored more concise forms of social self-efficacy focusing more on leadership, social encounters, and social independence.

Hypothesis 2 was supported. The result of this analysis indicated that improvement over time on the social skills questionnaire was dependent on the model the participant was enrolled in, either traditional or TR. This suggests that levels of social performance can be more positively affected through the use of therapeutic recreation within summer camp programs. These findings do appear to be consistent with existing literature. Winfree, Williams, and Powell (2002) recognize that summer camps are a valuable tool for addressing social performance issues. Melzer and Rourke (2005) also find that summer camps provide unique opportunities for socialization for individuals

with chronic illness. Wise (2008) found that therapeutic recreation services can greatly support many important health promoting behaviors, including social performance.

Implications for Practice and Research

There are several implications for both practice and research from this study. Those implications include theory based practice, the value of TR processes, training for recreation professionals, and new ways to assess programs.

Practice. Results from this study support the position that programs that are firmly based in theory can provide significantly meaningful results for participants. Furthermore, it seems that programming based upon social self-efficacy and social cognitive theory seemed to be effective at addressing social deficiencies, specifically within the therapeutic recreation and the summer camp industry, where social outcomes are targeted. Specifically in this study, it was evident that the use of peer models (other adolescents with NF) and vicarious experiences (a key component in social cognitive theory) were powerful tools in helping to increase social performance. Future recreation providers, especially Certified Therapeutic Recreational Specialists, can and should use social cognitive theory, in connection with their own therapeutic methods, to help promote positive social change within their client's lives (Wise, 2008). Future CTRSs should have a sound understanding of social cognitive theory and self-efficacy, as well as the knowledge to incorporate them into their practice. By building a practice based upon theory they can achieve a higher degree of success within the lives of their clients.

This study also supports the value of the therapeutic recreation process. Through the use of TR based assessments, targeted and specific program planning, proper

implementation, and thorough evaluation and documentation, campers were able to achieve a higher level of social interaction (Richeson, Croteau, & Jones, 2004). This is due in part to individualized assessments, customized programming, and individualized targeted goals and behavior objectives. Future recreation providers, including summer camps, which look to increase specific social skills within the lives of their clients, may find success utilizing the TR process by employing trained and certified therapeutic recreational specialists (Wise, 2002). By doing so they would find themselves better equipped to meet the individual social needs of their participants and would be able to provide a more targeted program aimed at directly addressing those needs so they could achieve specific, targeted results that benefit the lives of their participants.

An additional implication from this study is it supports the need for trained, devoted, and educated professionals within the field of recreation. This includes both the TR field, as well as the summer camp industry. It is vitally important that both fields employ staffs who are educated, committed to their mission, and willing to put in the long hard hours required to make their programs a success. The implementation of this study required many early mornings, late nights, and substantial paperwork. This was only accomplished through the use of at least eight dedicated TR professionals and interns. For programs to have continued success utilizing therapeutic recreation in future programs, whether within the summer camp field or not, it is essential that the TR staff be more dedicated to the mission of their organization, to the TR process, and to the field of therapeutic recreation. This dedication begins within universities, is strengthened through the internship process, and is fortified by continuing education throughout the life of the

CTRS. Without this devotion and continued growth, therapeutic recreation will not have a lasting impact.

Another implication from this study is based upon the ways that recreational providers assess or measure recreation programs. In this study the measures that were self-reported were not found to be significant while the measures based upon outside observations were found to be significant. It is important to create and utilize measures that are not simply based upon self-perceptions. Therefore, future recreation programs, including both TR based and summer camp programs, need to be able to use outcome measurements and assessments that go beyond mere self-reports.

Research. The implications for this study for research align with the same implications for practice. It is important that research continue to help strengthen programming by expanding the current literature on theory-based programming. It is also important to continue to explore the benefits of therapeutic recreation. Future research should focus on the benefits of partnering TR services and programming with other fields. It is also important to expand the knowledge base associated with program assessments and outcome measures. Future research can help target specific measures that are more reliable than self-reports; by doing so organizations can be better informed about the actual success of their programs and interventions.

Limitations

There were several limitations to this study that affected its results. These limitations include self-reporting by the participants, the use of social self-efficacy in a general term, raters being involved in the program implementation, the use of TR interns

instead of certified licensed TR professionals and the inability to independently and randomly assign campers to either model.

Self-reporting. Each of the participants was asked to provide a self-report of their social self-efficacy levels through the use of the social self efficacy scale (Muris, 2001). They were asked to complete this scale upon arrival and departure from their time at camp. Upon arrival, many participants were eager to reunite with past friends, while others were shy and visibly uncomfortable. Many had flown several hours to attend camp and had received little sleep the night before. Emotional highs and lows were observed throughout the first several hours of camp. These factors played a part in the participant's answers to the SSES that were outside the bounds of this study. Their emotional states may have influenced them to indicate higher or lower ratings than they normally would. Upon departure, many individuals also exhibited fluctuating emotional states that may have affected their SSES responses in ways unintended by this study.

It is also possible that participants were ranking themselves on what they wanted their scores to be and not on their actual social ability to interact with their peers. Past research suggests that subjects tend to answer questions based upon what they think the researcher wants to see or what reflects favorably on themselves (Cook & Campbell, 1979; Schacter, 1999). Several participants may have answered higher or lower on the SSES in an effort to "give" the correct answer or simply through self-deception, where their self-perception is inaccurate.

Social self-efficacy. Another limitation of this study is the focus on social self-efficacy. Even though social self-efficacy is more focused than just self-efficacy, it is still broad enough that it is difficult to see significant results in just 7 days. In the future, it is

advisable to focus social self-efficacy to more specific constructs, such as self-efficacy in leadership situations or social interactions self-efficacy. It is also favorable to utilize summer camp settings that allow for a longer time period than just 7 days.

Raters. Another limitation involved raters on the SSQ. The same individuals who rated the participants in the daily SSQ were some of the same individuals who implemented the daily programs. It is possible that they were not able to compartmentalize the successfulness of their program from the social successfulness of the individual participants within that program. This may have led to inadvertent inflation of SSQ ratings. In the future it is advisable that the raters be independent of the program implementation or at least have multiple individuals implement a program in an effort to help decrease the possibility of rater bias.

TR interns. A third limitation to this study was the use of TR interns instead of using certified, licensed, TR professionals during the TR Process Model week of summer camp. Interns were originally chosen to participate in this study because they were familiar with the camp's policies, procedures, and operations. They had also met basic competence standards, through Camp K, to participate in the TR process. However, CTRS would have had more experience with the TR process. They would have been better able to accurately perform assessments, plan intentional programming, implement activities, and execute critical evaluations and documentation. In the future, it is advisable to use both TR interns and TR professionals.

Random assignment. Due to the partnership with the host summer camp, the Kostopulos Dream Foundation, random selection or random assignment were not possible. A convenience sample was used where the participants were assigned to the

sessions of camp based upon their individual preference. This required the use of the first day of summer camp SSE and SSQ scores to be used as a covariate. If possible, in the future it would be preferential to randomly select or assign participants to either model.

Conclusion

The purpose of this research was to examine the effects of a therapeutic recreation based summer camp on social self-efficacy levels and social performance with peers among adolescents with chronic illness. Although hypothesis 1 of this study did not have statistical significance, hypothesis 2 was statistically significant. For adolescents with a chronic illness a decrease in social self-efficacy is a serious problem. Fortunately, therapeutic recreation based summer camps can help address those issues and provide an effective way to help strengthen and support social skills within adolescents with a chronic illness. Through this study it is clear that agencies and organizations that rely on theory-based programming, while utilizing the TR process and employing highly trained staff can help have a profound impact upon the social lives of the individuals they serve.

APPENDIX A

EXPLANATION OF APPENDICES

Appendix - Title	When Administered	What
A - EXPLANATION OF APPENDICES	N/A	To further explain the appendices
B - SOCIAL SELF-EFFICACY SCALE	Both Models, upon arrival & departure	Instrument used to measure Social Self-Efficacy
C - ADAPTED VERSION OF THE SOCIAL SKILLS QUESTIONNAIRE	Both Models, at the end of each day	Instrument used to measure Social Performance
D - COMBINED SUMMER CAMP MODEL SCHEDULES	N/A	Detailed description of daily activities for both models
E - TR ASSESSMENT	TR Process Model, upon arrival	First step in the TR process, also includes an observation component
F - ACTIVITY EVALUATION & DOCUMENTATION	Both Models, after every activity	To evaluate and document each activity
G - PROGRESS & OUTCOME REVIEW SHEETS	Both Models, after every activity	To evaluate and document each camper, during each activity
H - PARENTAL PERMISSION DOCUMENT	TR Process Model, before arrival	Parental Permission to participate in study
I - ASSENT TO PARTICIPATE DOCUMENT	TR Process Model, before arrival	Participant Assent Document to participate in study

APPENDIX B

SOCIAL SELF-EFFICACY SCALE (MURIS, 2001)

Measurement Scales and Descriptions
Outcome Category 1: Youth Personal Adjustment

Description: This subscale measures youths' self-assessments of their ability to negotiate social situations and produce successful social interactions.

Ages: This scale is recommended for youth ages 14-18 (Grades 8-12).

Reliability: Alpha is .85.

Number of Items: 8.

Scoring Procedures: The responses for items range from 1= Not Very Well to 5= Very Well. There are no items that need to be reversed scored. Responses are summed to produce the total score.

Permission: Not required for use of this scale.

Circle the answer that best shows how well you can do each of the following things.

1. How well can you express your opinions when youth your age disagree with you?
   Not Very Well 1 2 3 4 5 Very Well

2. How well can you become friends with other youth?
   Not Very Well 1 2 3 4 5 Very Well

3. How well can you have a chat with an unfamiliar person?
   Not Very Well 1 2 3 4 5 Very Well

4. How well can you work in harmony with youth your age?
   Not Very Well 1 2 3 4 5 Very Well

5. How well can you tell other youth that they are doing something that you don't like?
   Not Very Well 1 2 3 4 5 Very Well

6. How well can you tell a funny event to a group of youth?

Not Very Well 1 2 3 4 5 Very Well

7. How well do you succeed in staying friends with other youth?
Not Very Well 1 2 3 4 5 Very Well

8. How well do you succeed in preventing quarrels with other youth?
Not Very Well 1 2 3 4 5 Very Well

APPENDIX C

SOCIAL SKILLS QUESTIONNAIRE

Adapted Version of the Social Skills Questionnaire
Kostopulos Dream Foundation
Levinson, T.S. (2004)

Please use the following number scale (1-5) to rate your camper with this evaluation

(1) Strongly Agree
(2) Agree
(3) Neutral
(4) Disagree
(5) Strongly Disagree

1. This camper participated in social activities at camp

1	2	3	4	5	1st Day of Camp
1	2	3	4	5	2nd Day of Camp
1	2	3	4	5	3rd Day of Camp
1	2	3	4	5	4th Day of Camp
1	2	3	4	5	5th Day of Camp
1	2	3	4	5	6th Day of Camp

2. This camper is able to manage him/herself during both positive and negative social interaction with peers

1	2	3	4	5	1st Day of Camp
1	2	3	4	5	2nd Day of Camp
1	2	3	4	5	3rd Day of Camp
1	2	3	4	5	4th Day of Camp
1	2	3	4	5	5th Day of Camp

1 2 3 4 5 6th Day of Camp

3. This camper is responsible at camp and is doing well

1 2 3 4 5 1st Day of Camp

1 2 3 4 5 2nd Day of Camp

1 2 3 4 5 3rd Day of Camp

1 2 3 4 5 4th Day of Camp

1 2 3 4 5 5th Day of Camp

1 2 3 4 5 6th Day of Camp

4. This camper is able to work with others cooperatively

1 2 3 4 5 1st Day of Camp

1 2 3 4 5 2nd Day of Camp

1 2 3 4 5 3rd Day of Camp

1 2 3 4 5 4th Day of Camp

1 2 3 4 5 5th Day of Camp

1 2 3 4 5 6th Day of Camp

5. This camper initiates social contact with peers

1 2 3 4 5 1st Day of Camp

1 2 3 4 5 2nd Day of Camp

1 2 3 4 5 3rd Day of Camp

1 2 3 4 5 4th Day of Camp

1 2 3 4 5 5th Day of Camp

1 2 3 4 5 6th Day of Camp

APPENDIX D

COMBINED SUMMER CAMP MODEL SCHEDULES

<table>
<tr><th colspan="4">Traditional Camp K Model and TR Model</th><th colspan="2">TR Model only</th></tr>
<tr><th>SATURDAY</th><th>Group A</th><th>Group B</th><th>Group C</th><th>TR Staff A</th><th>TR Staff B</th></tr>
<tr><td>7:30AM</td><td colspan="3" rowspan="10">Campers' arrival at SLC International Airport. As campers arrive in groups they will be taken back to Camp K for check-in. All campers will arrive by 1:00pm. As campers arrive for check-in they will meet Camp K staff to take the social self-efficacy measure.</td><td rowspan="5">TR Assessments and creation of goals and objectives for each camper by recreational therapist</td><td rowspan="6">TR Assessments and creation of goals and objectives for each camper by recreational therapist</td></tr>
<tr><td>8:00</td></tr>
<tr><td>8:30</td></tr>
<tr><td>9:00</td></tr>
<tr><td>9:30</td></tr>
<tr><td>10:00</td><td rowspan="5">Lunch</td></tr>
<tr><td>10:30</td></tr>
<tr><td>11:00</td></tr>
<tr><td>11:30</td></tr>
<tr><td>12:00PM</td></tr>
<tr><td>12:30</td><td colspan="3" rowspan="2">Lunch and Medications</td><td rowspan="2">Plan program based upon assessments</td><td rowspan="2">Lunch</td></tr>
<tr><td>1:00</td></tr>
<tr><td>1:30</td><td colspan="3" rowspan="3">All camp initiatives and field games</td><td rowspan="3">Implement program plan & Assessment Observations</td><td rowspan="3">Plan program based upon assessments</td></tr>
<tr><td>2:00</td></tr>
<tr><td>2:30</td></tr>
<tr><td>3:00</td><td colspan="3">Swim Prep</td><td rowspan="3">Evaluations & Documentation</td><td rowspan="6">Implement program plan & Assessment Observations</td></tr>
<tr><td>3:15</td></tr>
<tr><td>3:30</td><td colspan="3" rowspan="3">Swimming</td></tr>
<tr><td>4:00</td></tr>
<tr><td>4:30</td></tr>
<tr><td>5:00</td><td colspan="3" rowspan="2">Swim Prep</td><td rowspan="3">Plan program based upon assessments</td></tr>
<tr><td>5:15</td></tr>
<tr><td>5:30</td></tr>
<tr><td>5:30</td><td colspan="4" rowspan="3">Dinner and Medications</td><td rowspan="3">Evaluations & Documentation</td></tr>
<tr><td>6:00</td></tr>
<tr><td>6:30</td></tr>
<tr><td>6:45</td><td colspan="3" rowspan="2">Camp History & Official Campfire Welcome</td><td rowspan="5">Implement program plan</td></tr>
<tr><td>7:00</td><td rowspan="2">Dinner</td></tr>
<tr><td>7:00</td><td colspan="3" rowspan="4">Movie Night in the Woods</td></tr>
<tr><td>7:30</td><td rowspan="3">Ongoing Observations</td></tr>
<tr><td>8:00</td></tr>
<tr><td>8:30</td></tr>
<tr><td>9:00</td><td colspan="3" rowspan="2">Bedtime Prep</td><td rowspan="2">Evaluations & Documentation</td><td rowspan="2">Plan tomorrow's first program based upon assessments</td></tr>
<tr><td>9:30</td></tr>
<tr><td>9:45</td><td colspan="5">Lights Out – SSQ Completed</td></tr>
<tr><td>10:00pm</td></tr>
</table>

<table>
<tr><th colspan="4">Traditional Camp K Model and TR Model</th><th colspan="2">TR Model only</th></tr>
<tr><th>SUNDAY</th><th>Group A</th><th>Group B</th><th>Group C</th><th>TR Staff A</th><th>TR Staff B</th></tr>
<tr><td>7:30AM</td><td colspan="3" rowspan="2">Wake Up & Get Dressed</td><td colspan="2" rowspan="4"></td></tr>
<tr><td>8:00</td></tr>
<tr><td>8:30</td><td colspan="3" rowspan="2">Breakfast and Medications</td></tr>
<tr><td>8:45</td></tr>
<tr><td>9:00</td><td colspan="3" rowspan="3">Load vans and travel to Raging Waters Water Park</td><td colspan="2" rowspan="5">All TR staff Meeting</td></tr>
<tr><td>9:15</td></tr>
<tr><td>9:30</td></tr>
<tr><td>9:45</td><td colspan="3" rowspan="2">Review rules and water park policies</td></tr>
<tr><td>10:00</td></tr>
<tr><td>10:30</td><td colspan="3" rowspan="5">Raging Waters Water Park</td><td></td><td rowspan="4">Implement program plan</td></tr>
<tr><td>11:00</td><td></td></tr>
<tr><td>11:30</td><td rowspan="2">Ongoing Observations</td></tr>
<tr><td>12:00</td></tr>
<tr><td>12:15</td><td colspan="3" rowspan="3">Lunch and Medications</td><td rowspan="3">Plan program based upon assessments</td><td rowspan="3">Evaluations & Documentation</td></tr>
<tr><td>12:30</td></tr>
<tr><td>12:45</td></tr>
<tr><td>1:00</td><td colspan="3" rowspan="7">Raging Waters Water Park</td><td rowspan="7">Implement program plan</td></tr>
<tr><td>1:30</td><td rowspan="2">Lunch</td></tr>
<tr><td>2:00</td></tr>
<tr><td>2:30</td><td rowspan="2">Ongoing Observations</td></tr>
<tr><td>2:45</td></tr>
<tr><td>3:00</td><td rowspan="4"></td></tr>
<tr><td>3:30</td></tr>
<tr><td>4:00</td></tr>
<tr><td>4:30</td><td colspan="3" rowspan="3">Load vans and travel back to Camp K</td><td rowspan="3">Evaluations & Documentation</td></tr>
<tr><td>4:45</td></tr>
<tr><td>5:00</td></tr>
<tr><td>5:30</td><td colspan="3" rowspan="2">Free time</td><td colspan="2" rowspan="3">Plan program based upon assessments</td></tr>
<tr><td>6:00</td></tr>
<tr><td>6:30</td><td colspan="3" rowspan="2">Dinner and Medications</td></tr>
<tr><td>7:00</td></tr>
<tr><td>7:30</td><td colspan="3" rowspan="4">Field Games/Night Games</td><td colspan="2" rowspan="4">Implement program plan</td></tr>
<tr><td>8:00</td></tr>
<tr><td>8:30</td></tr>
<tr><td>9:00</td></tr>
<tr><td>9:45</td><td colspan="3">Bedtime Prep</td><td colspan="2">Evaluations & Documentation</td></tr>
<tr><td>10:00pm</td><td colspan="5">Lights Out – SSQ Completed</td></tr>
</table>

<table>
<tr><th colspan="4">Traditional Camp K Model and TR Model</th><th colspan="2">TR Model only</th></tr>
<tr><th>MONDAY</th><th>Group A</th><th>Group B</th><th>Group C</th><th>TR Staff A</th><th>TR Staff B</th></tr>
<tr><td>7:30AM</td><td colspan="3" rowspan="2">Wake Up & Get Dressed</td><td colspan="2" rowspan="2">All TR staff Meeting</td></tr>
<tr><td>8:00</td></tr>
<tr><td>8:30</td><td colspan="3" rowspan="2">Breakfast and Medications</td><td rowspan="4">Plan programs based upon assessments</td><td rowspan="4"></td></tr>
<tr><td>8:45</td></tr>
<tr><td>9:00</td><td colspan="3" rowspan="2">Divide into Groups - Grass Lawn</td></tr>
<tr><td>9:15</td></tr>
<tr><td>9:30</td><td rowspan="6">High Ropes</td><td rowspan="6">Horses</td><td rowspan="6">Fishing & Sport Court</td><td rowspan="6">Implement program plans</td></tr>
<tr><td>10:00</td></tr>
<tr><td>10:30</td><td rowspan="3">Ongoing Observations</td></tr>
<tr><td>11:00</td></tr>
<tr><td>11:30</td></tr>
<tr><td>11:45</td><td>Plan program based upon assessments</td></tr>
<tr><td>12:00</td><td colspan="3" rowspan="2">Lunch and Medications</td><td rowspan="4">Evaluations & Documentation</td><td>Lunch</td></tr>
<tr><td>12:30</td><td rowspan="2">Lunch</td></tr>
<tr><td>12:45</td><td colspan="3" rowspan="2">Load Vans & Drive to Boondocks</td></tr>
<tr><td>1:00</td><td>Travel</td></tr>
<tr><td>1:30</td><td colspan="3" rowspan="10">Boondocks</td><td>Lunch</td><td rowspan="10">Implement program plan</td></tr>
<tr><td>2:00</td><td rowspan="2"></td></tr>
<tr><td>2:30</td></tr>
<tr><td>2:45</td><td rowspan="8">Plan program based upon assessments</td></tr>
<tr><td>3:00</td></tr>
<tr><td>3:30</td></tr>
<tr><td>4:00</td></tr>
<tr><td>4:30</td></tr>
<tr><td>4:45</td></tr>
<tr><td>5:00</td><td colspan="3" rowspan="2">Load Vans & Drive back to Camp K</td><td rowspan="2">Evaluations & Documentation</td></tr>
<tr><td>5:15</td></tr>
<tr><td>5:30</td><td colspan="3" rowspan="3">Dinner and Medications</td><td rowspan="3"></td><td rowspan="3">Dinner</td></tr>
<tr><td>6:00</td></tr>
<tr><td>6:30</td></tr>
<tr><td>7:00</td><td colspan="3" rowspan="4">CAMP K Wild West PARTY</td><td rowspan="4">Implement program plan</td><td rowspan="4"></td></tr>
<tr><td>7:30</td></tr>
<tr><td>8:00</td></tr>
<tr><td>8:30</td></tr>
<tr><td>9:00</td><td colspan="3" rowspan="2">Bedtime Prep</td><td rowspan="2">Evaluations & Documentation</td><td rowspan="2"></td></tr>
<tr><td>9:45</td></tr>
<tr><td>10:00pm</td><td colspan="5">Lights Out – SSQ Completed</td></tr>
</table>

<table>
<tr><th colspan="4">Traditional Camp K Model and TR Model</th><th colspan="2">TR Model only</th></tr>
<tr><th>TUESDAY</th><th>Group A</th><th>Group B</th><th>Group C</th><th>TR Staff A</th><th>TR Staff B</th></tr>
<tr><td>7:30AM</td><td colspan="3" rowspan="2">Wake Up & Get Dressed</td><td colspan="2" rowspan="2">All TR staff Meeting</td></tr>
<tr><td>8:00</td></tr>
<tr><td>8:30</td><td colspan="3" rowspan="2">Breakfast and Medications</td><td rowspan="5"></td><td rowspan="3">Plan programs based upon assessments</td></tr>
<tr><td>8:45</td></tr>
<tr><td>9:00</td><td colspan="3" rowspan="2">Load Vans & Drive to Park City</td></tr>
<tr><td>9:45</td><td>Travel</td></tr>
<tr><td>10:00</td><td colspan="3" rowspan="3">Olympic Oval Park</td><td rowspan="6">Implement program plans</td></tr>
<tr><td>10:30</td></tr>
<tr><td>10:45</td><td rowspan="4">Ongoing Observations</td></tr>
<tr><td>11:00</td><td colspan="3">Load Vans and Drive to Park City Mountain Resort</td></tr>
<tr><td>11:15</td><td colspan="3" rowspan="3">Park City Mountain Resort</td></tr>
<tr><td>11:30</td></tr>
<tr><td>11:45</td><td rowspan="2">Plan programs based upon assessments</td></tr>
<tr><td>12:00</td></tr>
<tr><td>12:30</td><td colspan="3" rowspan="3">Lunch and Medications</td><td rowspan="3">Evaluations & Documentation</td></tr>
<tr><td>1:00</td><td rowspan="2">Lunch</td></tr>
<tr><td>1:30</td></tr>
<tr><td>2:00</td><td colspan="3" rowspan="5">Park City Mountain Resort</td><td rowspan="5">Implement program plans</td><td></td></tr>
<tr><td>2:30</td><td>Lunch</td></tr>
<tr><td>3:00</td><td rowspan="2">Ongoing Observations</td></tr>
<tr><td>3:30</td></tr>
<tr><td>4:00</td><td></td></tr>
<tr><td>4:30</td><td colspan="3"></td><td></td></tr>
<tr><td>5:00</td><td colspan="3" rowspan="3">Load Vans & Drive to Camp K</td><td rowspan="3">Evaluations & Documentation</td><td>Dinner</td></tr>
<tr><td>5:30</td><td rowspan="3">Plan programs based upon assessments</td></tr>
<tr><td>5:45</td></tr>
<tr><td>6:00</td><td colspan="3" rowspan="3">Dinner and Medications</td><td>Travel</td></tr>
<tr><td>6:30</td><td rowspan="2">Dinner</td></tr>
<tr><td>7:00</td></tr>
<tr><td>7:15</td><td rowspan="4">Horses</td><td rowspan="4">Fishing & Sport Court</td><td rowspan="4">High Ropes</td><td>Ongoing Observations</td><td rowspan="3">Implement program plans</td></tr>
<tr><td>7:30</td></tr>
<tr><td>8:00</td><td rowspan="3">Plan tomorrow's first program based upon assessments</td></tr>
<tr><td>8:30</td></tr>
<tr><td>9:00</td><td colspan="3" rowspan="2">Bedtime Prep</td><td rowspan="2">Evaluations & Documentation</td></tr>
<tr><td>9:45</td></tr>
<tr><td>10:00pm</td><td colspan="5">Lights Out – SSQ Completed</td></tr>
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<table>
<tr><th colspan="4">Traditional Camp K Model and TR Model</th><th colspan="2">TR Model only</th></tr>
<tr><th>WEDNESDAY</th><th>Group A</th><th>Group B</th><th>Group C</th><th>TR Staff A</th><th>TR Staff B</th></tr>
<tr><td>7:30AM</td><td colspan="3" rowspan="2">Wake Up & Get Dressed</td><td colspan="2" rowspan="3"></td></tr>
<tr><td>8:00</td></tr>
<tr><td>8:30</td><td colspan="3" rowspan="2">Breakfast and Medications</td></tr>
<tr><td>8:45</td><td colspan="2" rowspan="3">All TR staff Meeting</td></tr>
<tr><td>9:00</td><td colspan="3" rowspan="2">Load Vans and Drive to Hogle Zoo</td></tr>
<tr><td>9:15</td></tr>
<tr><td>9:30</td><td colspan="3" rowspan="3">Hogle Zoo</td><td rowspan="3">Implement program plans</td><td rowspan="3"></td></tr>
<tr><td>10:00</td></tr>
<tr><td>10:30</td></tr>
<tr><td>11:00</td><td colspan="3" rowspan="2">Load Vans and Drive to Raging Waters</td><td rowspan="4">Evaluations & Documentation</td><td rowspan="4">Plan programs based upon assessments</td></tr>
<tr><td>11:30</td></tr>
<tr><td>12:00</td><td colspan="3" rowspan="2">Lunch and Medications at Raging Waters</td></tr>
<tr><td>12:30</td></tr>
<tr><td>1:00</td><td colspan="3" rowspan="8">Raging Waters Water park</td><td>Lunch</td><td rowspan="8">Implement program plans</td></tr>
<tr><td>1:30</td><td rowspan="3">Ongoing Observations</td></tr>
<tr><td>2:00</td></tr>
<tr><td>2:30</td></tr>
<tr><td>3:00</td><td rowspan="6">Plan programs based upon assessments</td></tr>
<tr><td>4:00</td></tr>
<tr><td>5:00</td></tr>
<tr><td>5:15</td><td colspan="3" rowspan="3">Load Vans & Drive to Camp K</td><td rowspan="3">Evaluations & Documentation</td></tr>
<tr><td>5:30</td></tr>
<tr><td>5:45</td></tr>
<tr><td>6:00</td><td colspan="3" rowspan="4">Dinner and Medications</td><td rowspan="4">Dinner</td><td rowspan="4">Dinner</td></tr>
<tr><td>6:15</td></tr>
<tr><td>6:30</td></tr>
<tr><td>6:45</td></tr>
<tr><td>7:00</td><td rowspan="4">Fishing & Sport Court</td><td rowspan="4">High Ropes</td><td rowspan="4">Horses</td><td rowspan="4">Implement program plans</td><td rowspan="2">Ongoing Observations</td></tr>
<tr><td>7:15</td></tr>
<tr><td>7:30</td><td rowspan="4">Plan tomorrow’s first program based upon assessments</td></tr>
<tr><td>8:00</td></tr>
<tr><td>8:30</td><td colspan="3" rowspan="3">Bedtime Prep</td><td rowspan="3">Evaluations & Documentation</td></tr>
<tr><td>9:00</td></tr>
<tr><td>9:45</td></tr>
<tr><td>10:00pm</td><td colspan="5">Lights Out – SSQ Completed</td></tr>
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<table>
<tr><th colspan="4">Traditional Camp K Model and TR Model</th><th colspan="2">TR Model only</th></tr>
<tr><th>THURSDAY</th><th>Group A</th><th>Group B</th><th>Group C</th><th>TR Staff A</th><th>TR Staff B</th></tr>
<tr><td>7:30AM</td><td colspan="3" rowspan="2">Wake Up & Get Dressed</td><td colspan="2"></td></tr>
<tr><td>8:00</td><td colspan="2" rowspan="3">All TR staff Meeting</td></tr>
<tr><td>8:30</td><td colspan="3" rowspan="2">Breakfast and Medications</td></tr>
<tr><td>8:45</td></tr>
<tr><td>9:00</td><td colspan="3" rowspan="6">Extreme Camp K Survivor Day</td><td rowspan="2">Ongoing Observations</td><td rowspan="6">Implement program plans</td></tr>
<tr><td>9:30</td></tr>
<tr><td>10:00</td><td rowspan="4">Plan programs based upon assessments</td></tr>
<tr><td>10:30</td></tr>
<tr><td>11:00</td></tr>
<tr><td>11:30</td></tr>
<tr><td>12:00</td><td colspan="3" rowspan="2">Lunch and Medications</td><td></td><td rowspan="3">Evaluations & Documentation</td></tr>
<tr><td>12:30</td><td rowspan="6">Implement program plans</td></tr>
<tr><td>1:00</td><td colspan="3" rowspan="5">Extreme Camp K Survivor Day</td></tr>
<tr><td>1:30</td></tr>
<tr><td>2:00</td><td>Lunch</td></tr>
<tr><td>2:30</td><td rowspan="2">Ongoing Observations</td></tr>
<tr><td>3:00</td></tr>
<tr><td>3:30</td><td rowspan="3">Plan programs based upon assessments</td></tr>
<tr><td>3:45</td><td colspan="3" rowspan="2">Chill Time</td><td rowspan="3">Evaluations & Documentation</td></tr>
<tr><td>4:00</td></tr>
<tr><td>4:15</td><td colspan="3" rowspan="3">Dr. Viskochil - Q & A</td><td rowspan="4">Implement program plans</td></tr>
<tr><td>4:30</td></tr>
<tr><td>5:00</td><td rowspan="2">Ongoing Observations</td></tr>
<tr><td>5:15</td></tr>
<tr><td>5:30</td><td colspan="3" rowspan="2">BBQ on the Lawn</td><td>Dinner</td><td rowspan="2">Evaluations & Documentation</td></tr>
<tr><td>5:45</td><td rowspan="3">Plan programs based upon assessments</td></tr>
<tr><td>6:00</td><td colspan="3" rowspan="2">Practice Skits</td><td rowspan="3">Dinner</td></tr>
<tr><td>6:30</td></tr>
<tr><td>6:45</td><td colspan="3" rowspan="3">Talent, Skit, & Awards Show</td><td rowspan="3">Implement program plans</td></tr>
<tr><td>7:00</td></tr>
<tr><td>7:30</td><td rowspan="2">Ongoing Observations</td></tr>
<tr><td>8:00</td></tr>
<tr><td>8:15</td><td colspan="3" rowspan="5">Bedtime Prep & Pack Bags – Camp K Staff will meet with each camper individually for the social self-efficacy scale.</td><td>Evaluations & Documentation</td><td>Discharge interviews</td></tr>
<tr><td>8:30</td><td colspan="2" rowspan="4">Discharge interview and social self-efficacy scale</td></tr>
<tr><td>9:00</td></tr>
<tr><td>9:30</td></tr>
<tr><td>9:45</td></tr>
<tr><td>10:00</td><td colspan="5">Lights Out – SSQ Completed</td></tr>
</table>

<table>
<tr><th colspan="4">Traditional Camp K Model and TR Model</th><th colspan="2">TR Model only</th></tr>
<tr><th>FRIDAY</th><th>Group A</th><th>Group B</th><th>Group C</th><th>TR Staff A</th><th>TR Staff B</th></tr>
<tr><td>3:30am</td><td colspan="3" rowspan="2">Wake up, Get dressed, Come down to the lodge</td><td colspan="2" rowspan="7">Assist with check-out</td></tr>
<tr><td>:45</td></tr>
<tr><td>4:00am</td><td colspan="3" rowspan="2">Breakfast & Medications</td></tr>
<tr><td>:15</td></tr>
<tr><td>:30</td><td colspan="3">Personal Belongings handed back out</td></tr>
<tr><td>:45</td><td colspan="3">Load Vans</td></tr>
<tr><td>5:00am</td><td colspan="3" rowspan="2">Leave for Airport - Camper fly out between 6:45am and 10:30am</td></tr>
<tr><td>:15</td></tr>
</table>

APPENDIX E

THERAPEUTIC RECREATION ASSESSMENT

Participant's Name_____ Age_____
Primary Diagnosis_____ Secondary_____
Education/Occupation_____

This assessment (LEA) was developed specifically for The Kostopulos Dream Foundation's programs. It is designed to measure two things: 1) the participant's overall functional ability 2) the participant's level of participation, attitude, and skill level in recreation and leisure activities. The information gathered from this assessment will be used to establish therapeutic goals for the participant. The LEA is designed to be given in a personal interview setting including the TR professional, the participant and his/her family or primary caregiver.

Social Assessment

Please rate the participant's supervision needs:

1	2	3	4	5
Strictly one on one	Can function with supervision in small groups (4 or less)	Can function in small groups (4 or less)	Can function with close supervision in large groups (5 or more)	Can function well in large groups (5 or more)

What are some behaviors the participant may exhibit in a large group? _____
_____

How does the participant communicate needs and wants? (Check all that apply)

_____ Does not communicate needs or wants

_____ Communicates with adaptive equipment
picture board
electronic device

_____ Communicates through gestures, body language, and sounds
verbal *nonverbal*

____ Communicates through language,
coherent *incoherent*
sign language

Explain:_____
_____

Describe situations in which the participant is socially appropriate/inappropriate:
_____
_____

Does the participant wander away from large groups or get distracted easily? Yes No
_____
_____
_____

How does the participant interact with peers?

1	2	3	4	5
Does Not Interact with Peers	With Frequent prompting interacts with peers	With prompting interacts with peers	Independently initiates interaction with peers	Seeks out and develops new relationships

Comments:_____
_____

Additional Social Comments: _____
_____
_____
_____

Emotional Assessment

How does the participant express his/her feelings? _____
_____

Does the participant demonstrate respect for self and others? How?_____
_____

Describe the participant's frustration tolerance: _____
_____

Describe the participant's behaviors when frustrated/upset:_____
_____

What triggers these behaviors? _____
_____

What is the best way to deescalate these behaviors (how are they handled at home)?____
_____
_____

Character Strengths

What character strengths does the participant demonstrate?
- *Wisdom and Knowledge* (Creativity, Curiosity, Open-mindedness, Love of learning, Perspective)
- *Courage* (Bravery, Persistence, Integrity, Vitality)
- *Humanity* (Love, Kindness, Social Intelligence)
- *Justice* (Citizenship, Fairness, Leadership)
- *Temperance* (Forgiveness and mercy, Humility/Modesty, Prudence, Self-regulation)
- *Transcendence* (Appreciation of Beauty and excellence, Gratitude, Hope, Humor, Spirituality)

_____
_____
_____

What factors of self esteem does the participant exhibit? (check all that apply)

____ Neat /clean appearance	____ Assertive	____ Smiles	____ Makes "I can" statements	____ Makes positive statements about self	____ Perceives that people like him/her

How often does the participant exhibit these behaviors?

1	2	3	4	5
Does not exhibit factors daily	Exhibits 1-2 factors daily	Exhibits 3 - 4 factors daily	Exhibits 5 - 6 factors daily	Exceeds all factors daily

Comments: _____
_____
_____
_____
_____
_____
_____

Cognitive Assessment

Rate the participant's ability to follow directions:

1	2	3	4	5
Unable to follow directions	Requires continual cues or prompts to follow directions	Requires occasional cues or prompts to follow directions	Independently Follows Directions	Assists others to follow directions

What types of directions does the participant follow?

1	2	3	4	5
Does not understand directions	Shows understanding but does not follow	Can follow 1 step commands	Can follow 2 – 3 step commands	Can follow directions easily

Explain:
_____
_____

Does the participant demonstrate good judgment concerning personal safety? Yes No
Explain:_____
_____

Rate the participant's ability to follow rules:

1	2	3	4	5
Does not follow the rules/safety of the activity	With prompting follows some of the rules/safety of the activity	Follows some of the rules/safety of the activity	Follows most of the rules/safety of the activity	Follows all of the rules/safety of activities

What cognitive age level does the participant function at? _____
Comments: _____
_____
_____

Physical Assessment

Explain the participant's needs regarding mobility (ambulatory, wheelchair, walker, adaptive device, balance, depth perception, etc. How does assistive device work?):

_____
_____
_____
_____

Rate the participant's energy level:

1	2	3	4	5
Low energy, primarily watches, tires easily, lethargic	Mostly a watcher tires easily but will try to participate	Medium Energy, Participates in activities, normal energy level	Can be hyper at times, but usually only for short periods of time	High energy, Constantly moving fidgety, very hyper, may be hard to control.

Explain: _____
_____
_____
_____
_____

Rate the participant's fitness/endurance level:

1	2	3	4	5
Unable to participate due to physical condition	Able to participate in activity for at least 5 minutes	Able to participate in activity for at least 15 minutes	Able to participate in activity for at least 30 minutes	Able to participate for the entire length of the activity

Check all that apply

___hearing impairment _____
_____
___vision impairment _____
_____
___medical conditions (seizures, asthma, etc) _____
_____

Explain care:

___medications during activity times _____
_____
___allergies (food, insects, medication, other): _____
_____
___diet restrictions _____
_____
___are over the counter meds okay? _____
_____

___other:_____ _____
_____

Does the participant need assistance with personal care tasks? _____
Use these terms to indicate assistance needed: Independent(I), Needs prompts(NP), Needs assistance(NA)
Toileting_____ Washing:_____ Dressing: _____Grooming:_____ Eating: _____
Explain: _____
_____
_____
Comments on other Physical needs: _____
_____
_____

Recreation and Leisure

What are some of the participant's hobbies and interests?

____Outdoor Recreation	____ Sports and Games	____Other: _____
____ Creative Arts	____ Fine Arts	_____
____ Solitary Activities	____ Social Activities	____Other: _____
____ Music	____ Literature	_____

List some specific Activities: _____
_____
Skill/ability level: _____
_____
How often does the participant engage in these activities?
_____ times per week
_____ times per month

Who does the participant engage in these types of activities with?

Alone	Family	Friends	Staff

Who plans the activities? _____
What is the participant's attitude toward leisure activities: _____
_____
_____
Please rate the participant's level of participation in activities:

1	2	3	4	5
Withdraws from activity	With frequent prompting from staff, will participate	With occasional prompting from staff, will participate	Without prompting from staff, will actively participate	Demonstrates leadership of activity

What new activities would the participant like to try? _____
_____
Comments: _____
_____

Goals

What areas would you like to see the participant improve in? _____

Social Emotional Cognitive Physical Behavioral

What specific skills/abilities would you like the participant to gain while participating in this program?

_____
_____
_____
_____

Other comments or concerns:_____
_____

Staff Signature: _____ Date: _____

Guardian Signature: _____ Date: _____

Participant Signature: _____ Date: _____

Observational Assessment

Observe the participant as he/she is involved in an activity and write a paragraph summarizing your observations. Pay close attention to, and include information on the following domains: **Social, Emotional, Cognitive, Behavioral,** and **Physical**. Please use both objective and subjective information.

Participant's Strengths: (During observation, identify participant's strengths. i.e. abilities, family support, character, attitude)

Participant's Needs: (During observation, identify participant's needs pertaining to independent leisure participation)

Individual Intervention Plan

Recommended Program(s):

K-Kids	Teens Quest	Adult Social Club
Trip Camp	Special Clinics	Summer Camp
Mini-Camp	Other: _____	

List recommended activities or Interventions:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Techniques to be used by staff (Modeling, Behavior modification, Reflecting, Debriefing, etc.)

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Environment(s) in which to facilitate change:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Participant Goal Sheet

Program _____

Goal 1

Category: Cognitive Social Emotional Physical Behavioral

Goal:

Objectives: 1)

2)

3)

Goal 2

Category: Cognitive Social Emotional Physical Behavioral

Goal:

Objectives: 1)

2)

3)

Goal 3

Category: Cognitive Social Emotional Physical Behavioral

Goal:

Objectives: 1)

2)

3)

Long Term Goal(s):

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

APPENDIX F

ACTIVITY EVALUATION AND DOCUMENTATION

ACTIVITY EVALUATION & DOCUMENTATION

Pick up/ Drop off / Activity on time? Y N Explain_____

_____

Summary of Activity: _____

_____

_____

_____

Were Goals and objectives met? Y N If no why not? _____

Goal: _____

OBJ #1_____

_____

OBJ #2_____

_____

OBJ #3_____

_____

Participant Eval. (Behavior Concerns):_____

_____

Adaptations/ Changes Made: _____

_____

Should this Activity be repeated? Y N Future considerations: _____

_____

Staff Signature: _____

VOLUNTEER EVALUATION

Volunteer Name	Hours	Comments
1.		
2.		
3.		
4.		

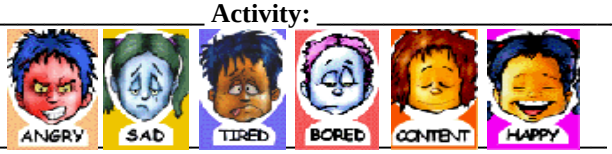
APPENDIX G

PROGRESS NOTES

Kostopulos Dream Foundation Progress Notes & Sheets

It is vital that each participant is assessed and evaluated for proper services to be provided by staff. Please complete a brief progress note after each activity the camper participates in. FOCUS ON THE INDIVIDUAL GOAL and write how the participant is progressing and working on that goal. PLEASE WRITE OBSERVABLE AND MEASURABLE STATEMENTS AND/OR BEHAVIORS!

Date_____ **Activity:** _____

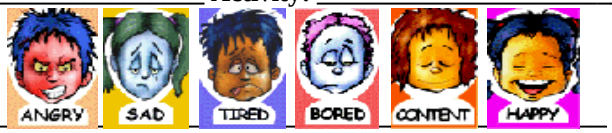
Moods: _____ 

_____

Goal Progress: _____
_____

_____
_____

Date_____ **Activity:** _____

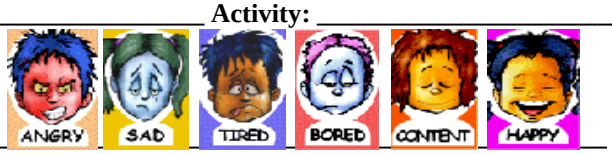
Moods: _____ 

_____

Goal Progress: _____
_____

_____
_____

Date_____ **Activity:** _____

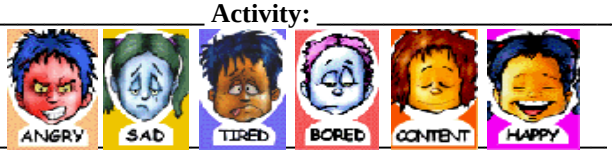
Moods: _____ 

_____

Goal Progress: _____
_____

_____
_____

Date_____ **Activity:** _____

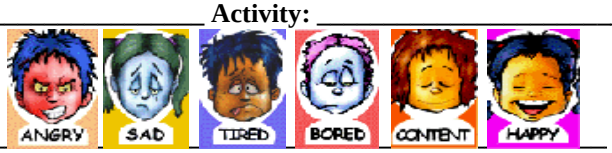
Moods: _____ 

_____

Goal Progress: _____
_____

_____
_____

Date_____ **Activity:** _____

Moods: _____ 

_____

Goal Progress: _____
_____

_____
_____

Camp Kostopulos Participant Outcome Review Sheet

Participant Name:_____ Program: _____

Goal 1: _____ Objective 1: _____

Objective 2: _____ Objective 3: _____

Goal 2: _____ Objective 1: _____

Objective 2: _____ Objective 3: _____

Goal 3: _____ Objective 1: _____

Objective 2: _____ Objective 3: _____

To the Right are 7 outcomes designed to measure the participant's ability levels throughout their participation at Camp Kostopulos.	Goal Attainment (Individual goals) 1 - Does not work on goals or objectives 2 - Works on at least 1 goal or objective 3 - Works on at least 2 goals or objectives 4 - Works on at least 3 goals or objectives 5 - Exceeds at least 1 goal or objective	Goal Attainment (Activity goals) 1 - Does not work on goals or objectives 2 - Works on at least 1 goal or objective 3 - Works on at least 2 goals or objectives 4 - Works on at least 3 goals or objectives 5 - Exceeds at least 1 goal or objective	Enhance Self Esteem 1 - Does not meet Factors 2 - Exhibits 1 to 2 factors 3 - Exhibits 3 to 4 factors 4 - Exhibits 5 to 6 factors 5 - Exceeds all factors	Improve Ability to Interact with Peers 1 - Does not interact with peers 2 - With frequent prompting interacts with peers 3 - With occasional prompting interacts with peers 4 - Independently initiates interaction with peers 5 - Exceeds at developing new relationships	Improve Ability to Follow Directions 1 - Unable to follow directions 2 - Requires continual cues or prompts to follow directions 3 - Requires occasional cues or prompts to follow directions 4 - Independently follows directions 5 - Exceeds at Assisting others to follow directions	Increase Participation/ Involvement in Group Activities 1 - Withdraws from activity 2 - With frequent prompting from staff, will participate 3 - With occasional prompting from staff will participate 4 - Without prompting actively engages and participates 5 - Exceeds at Demonstrating leadership of activity	Improve or Maintain Cardiovascular Fitness Level 1 - Unable to participate due to physical condition 2 - Able to participate in physical activity for some of the time 3 - Able to participate in physical activity for most of the time 4 - Able to participate in physical activity for all of the time. 5 - Exceeds at motivating and energizing others	Improve Understanding of Rules/Safety of Activities 1 -Does not follow the rules/safety of the activity 2 - Follows some of the rules/safety of activity 3 - Follows most of the rules of the activity 4 - Follows all of the rules/safety of the activity 5 - Exceeds at Assisting others to stay safe during the activity	
Date:	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
Date:	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
Date:	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
Date:	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
Date:	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	
Date:	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	

APPENDIX H

PARENTAL PERMISSION DOCUMENT

BACKGROUND
Your child is being asked to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether you want to volunteer to take part in this study.

The purpose of this study is to examine the effects of a therapeutic recreation based summer camp on social self-efficacy levels among adolescents with chronic illness. This research is being done to see if therapeutic recreation based summer camps can help increase levels of social self-efficacy among adolescents with chronic illnesses. The intervention will be conducted by the Kostopulos Dream Foundation, with the research being analyzed by a graduate student from the University of Utah.

STUDY PROCEDURE
It will take your child approximately 10 minutes to complete this study. As part of this study your child will be asked to fill out a short eight question survey at the beginning and at the conclusion of your summer camp session with the Kostopulos Dream Foundation. This survey will ask your child questions about social self-efficacy.

RISKS
The risks of this study are minimal. Your child may feel upset thinking about or talking about personal information related to social self-efficacy and various social situations. These risks are similar to those your child may experience when discussing personal information with others. If your child feels upset from this experience, you or your child can tell the researcher, and he/she will tell you and/or your child about resources available to help.

BENEFITS
There are no direct benefits for taking part in this study. However, we hope the information we get from this study may help develop a greater understanding of ways to improve social self-efficacy among adolescents with chronic illness in the future.

CONFIDENTIALITY
Your child's data will be kept confidential. Data and records will be stored in a locked filing cabinet or on a password protected computer located in the researcher's work space. Only the researcher and members of his/her study team will have access to this

information. In addition, names will not be kept with your responses. All responses will be properly coded to preserve your child's confidentially.

PERSON TO CONTACT
If you or your child have questions, complaints, concerns about this study, or feel that you and/or your child have been harmed as a result of participation please contact Jared Allsop at 801-358-2849 who may be reached 24 hours a day.

Review Board: Contact the Institutional Review Board (IRB) if you have questions regarding your child's rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

Research Participant Advocate: You may also contact the Research Participant Advocate (RPA) by phone at (801) 581-3803 or by email at participant.advocate@hsc.utah.edu.

VOLUNTARY PARTICIPATION
It is up to you to decide whether to allow your child to take part in this study. Refusal to allow your child to participate or the decision to withdraw your child from this research will involve no penalty or loss of benefits to which your child is otherwise entitled. This will not affect your or child's relationship with the investigator or with the Kostopulos Dream Foundation.

COSTS AND COMPENSATION TO PARTICIPANTS
There is no additional cost or compensation to participants to participate in this study.

CONSENT
By signing this consent form, I confirm I have read the information in this parental permission form and have had the opportunity to ask questions. I will be given a signed copy of this parental permission form. I voluntarily agree to allow my child to take part in this study.

_____
Child's Name

_____
Parent/Guardian's Name

_____ _____
Parent/Guardian's Signature Date

_____
Relationship to Child

_____
Name of Person Obtaining Consent

_____ _____
Signature of Person Obtaining Consent Date

APPENDIX I

ASSENT TO PARTICIPATE IN A RESEARCH STUDY

Who are we and what are we doing?
We are from the University of Utah and working with the Kostopulos Dream Foundation. We would like to ask if you would be in a research study. A research study is a way to find out new information about something. This is the way we try to find out how adolescents, or older kids, how have a chronic illness feel about social interactions and social relationships.

Why are we asking you to be in this research study?
We are asking you to be in this research study because we want to learn more about social interactions among adolescents with chronic illnesses. We want you to be in this study because you are an adolescent with a chronic illness.

What happens in the research study?
If you decide to be in this research study and your parent or guardian agree, we will ask you to fill out a simply survey at the beginning and end of your summer camp session here at the Kostopulos Dream Foundation, otherwise known as Camp K. We will look at your answers to see how adolescents with chronic illnesses feel about various social situations. You will be in this study for one week or the length of your stay at Camp K.

Will any part of the research study hurt you?
There is a chance that during this research study that some of the questions may make you feel afraid, uncomfortable, or hurt. We will try to help you feel better if this happens. You can stop at any time if you want to.

Will the research study help you or anyone else?
We do not know for sure if being in this research study will help you. It is possible that we could learn something to help other people with chronic illnesses in various social situations some day.

Who will see the information about you?
Only the researchers will be able to see the information about you from this research study. We will not tell anyone else that you are in the study.

What if you have any questions about the research study?
It is okay to ask questions. If you don't understand something, you can ask us. We want you to ask questions now and anytime you think of them. If you have a question later that you didn't think of now, you can call Jared Allsop at 801-358-2849 or ask us the next time we see you.

Do you have to be in the research study?
You do not have to be in this study if you don't want to. Being in this study is up to you. No one will be upset if you don't want to do it. Even if you say yes now, you can change your mind later and tell us you want to stop. You can take your time to decide. You can talk to your parent or guardian before you decide. We will also ask your parent or guardian to give their permission for you to be in this study. But even if your parent or guardian say "yes" you can still decide not to be in the research study.

Agreeing to be in the study
I was able to ask questions about this study. Signing my name at the bottom means that I agree to be in this study. My parent or guardian and I will be given a copy of this form after I have signed it.

_____
Printed Name

_____ _____
Sign your name on this line Date

_____
Printed Name of Person Obtaining Assent

_____ _____
Signature of Person Obtaining Assent Date

The following should be completed by the study member conducting the assent process if the participant agrees to be in the study. Initial the appropriate selection:

_____ *The participant is capable of reading the assent form and has signed above as documentation of assent to take part in this study.*

_____ *The participant is not capable of reading the assent form, but the information was verbally explained to him/her. The participant signed above as documentation of assent to take part in this study.*

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